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THE ILLUSTRATED

HANDBOOK OF ARCHITECTURE:

BEING A CONCISE AND POPULAR ACCOUNT OF

THE DIFFERENT STYLES OF ARCHITECTURE PREVAILING IN ALL AGES AND COUNTRIES.

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BY JAMES FERGUSSON, M.R.I.B.A.,

AUTHOR OF 'PALACES OF NINEVEH AND PERSEPOLIS RESTORED.'

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PART II.

CHRISTIAN ARCHITECTURE.

BOOK I.

ROMANESQUE.

CHAPTER I.

INTRODUCTORY.

LIKE the study of all modern history, that of Christian architecture commences with Rome, and not, as is sometimes supposed, where the history of Rome leaves off, but far back in the Empire, if not, indeed, almost in the Republic.

As has already been pointed out, the whole history of the art in Imperial Rome is that of a style in course of transition, beginning with a purely Pagan or Grecian style in the age of Augustus, and passing into one almost wholly Christian in the age of Constantine.

At the first epoch of the Empire the temple architecture of Rome consisted in an external arrangement of columns, without arches or vaults, and wholly unsuited to the purposes of Christian worship. Towards the end of the period it had become an internal architecture, using arches and vaults almost entirely to the exclusion of the columnar orders, except as ornaments, and so perfectly adapted to Christian forms, that little or no essential change has taken place in them from that time to the present day. A basilica of the form adopted in the first century after Constantine is as suited now as it was then to the forms and ceremonies of the Christian ritual.

The fact seems to be, that during the first three centuries after the Christian era an immense change was silently but certainly working its way in men's minds. The old religion was effete: the best men, the most intellectual spirits of the age had no faith in it; and the new religion with all its important consequences was gradually supplying its place in the minds of men long before it was adopted as a form.

There is thus no real distinction between the Emilian or Ulpian basilicas and those which Constantine erected for the use of the early Christian republic. Nor is it possible, in such a series as the Pantheon, the Temple of Minerva Medica, and the Church of San Vitale at Ravenna, to point out what part really belongs to Pagan, and what to Christian art.

It is true that Constantine fixed the epoch of completed transition, and gave it form and substance; but long before his time Paganism was impossible, and a reform inevitable. The feeling of the world had changed—its form of utterance followed as a matter of course.

Viewed in this light, it is impossible to separate the early history of Christian art from that of Imperial Rome. The sequence is so immediate, and the change so gradual, that a knowledge of the first is absolutely indispensable to a right understanding of the second.

Although, therefore, to prevent needless repetition, and breaking again the thread of the subsequent narrative, it has been deemed expedient to interpolate the Saracenic styles before taking up the Christian, it will be understood that, philosophically at least, these chapters follow immediately on those which treat of the architecture of Imperial Rome; and having now discussed all the styles of the world except the Christian, it only remains to follow that style in its two great branches, the Gothic and Byzantine, till both perished before the rising influence of the Renaissance.

The first chapter in this history must necessarily be devoted to the Romanesque or debased Roman—the first form which Christian architecture took on emancipating itself entirely from Pagan influence.

This style prevailed not only in the West, but in the East, over the whole of the great Roman empire, from the time of Constantine to that of Justinian. It can only, however, be considered as a second stage of transition, which after two centuries' duration branched off into the two great divisions of Christian architecture—the Byzantine and the Gothic. The origin of these two styles being identical, and their duration about the same, it is almost immaterial which is first taken up and followed to the close.

It will be more convenient to take up the Western styles first, not only on account of their greater importance, but because they flow more consecutively out of the Romanesque, and throughout their whole history remained more directly under its influence than the more Eastern styles.

After the age of Justinian the Byzantine separated itself wholly from the Roman types; but this was not the case in the West. The Romanesque prevailed in Rome itself during the whole period of the middle ages, and in the 16th century faded by almost imperceptible degrees into the Renaissance. It prevailed also down to the 11th and 12th centuries on both shores of Italy, and in the south of France wherever the barbarians did not penetrate. It consequently would cause a break in the thread of the narrative, if, after carrying the Romanesque style down to the time of Justinian, we should turn aside to the subject of Byzantine architecture, and then resume the history of the Western style, till we find it mingling with and influencing the art practised by the barbarians who overthrew the Western empire.

Nomenclature.

Before proceeding to describe any of these styles, it is necessary to say a few words on the nomenclature to be adopted; not that there is really any difficulty in the subject, but that, as always happens in young sciences, considerable confusion has been introduced by hasty

generalization and ill-judged attempts to apply a system of names suited to preconceived ideas, instead of merely affixing such names as serve best to describe the objects spoken of.

In speaking for instance of the styles that have already occupied our attention, it has been sufficient to specify Egyptian, Assyrian, Persian, or Grecian and Roman architecture; subdividing these, when necessary, either by mentioning the age of the variety we wished to particularize, or applying to it some dynastic or epochal name in order to fix its age. Thus the varieties of Egyptian architecture are identified by describing them as the styles of the 4th or of the 18th dynasty, or of the Ptolemys or Romans. These varieties too may be farther marked by the names of kings to any extent required. The ages of Pericles and Alexander were the two great epochs of Grecian art, and names either before or after these may be taken to fix the age and style of any work with the utmost precision. So in Rome the names of Augustus, Nero, or Trajan; of the Antonines, of Caracalla, or of Constantine, subdivide their art without confusion or mistake, and without the necessity of any system. But after this age these wise and simple principles of nomenclature have been abandoned. It has become, for instance, the fashion to apply the term Byzantine to styles as unlike anything Byzantium ever saw as any one style can be to another, and where it is impossible to trace any influence, direct or indirect, that capital had on the buildings in question. Romanesque in like manner is applied to styles as essentially Barbarian as the most pointed and most florid Gothic. It has been attempted to apply the name Lombard to all the round arched styles of Europe, and German and Teutonic to all the pointed arched styles, all involving the assumption of theories which, so far from being granted, are generally without the least foundation in fact.

In this country this predilection for the systematizing of styles has been pursued with more assiduity than elsewhere, and one nomenclature has succeeded another with a rapidity that has rendered confusion worse confounded.

One of the earliest and best attempts was that of Rickman; he divided our native art into four divisions: Norman, Early English or Lancet, Decorated, and Perpendicular. From the last it has been found requisite to separate the Tudor, as a well-defined variety; and the acknowledgment of Saxon has again entitled that style to rank with the rest. We have here, therefore, three or four dynastic names, and as many technical ones. Latterly several attempts have been made to improve on this, but generally by getting rid of the dynastic names and substituting for them technical ones—derived either from the window tracery, or some subordinate peculiarity which the names assigned always describe briefly, often incorrectly, and after all convey no information. The terms Saxon, Norman, Tudor, Elizabethan, and such like, however, maintain their ground, and I believe a far more philosophical course would be to extend these, leaving the technical names merely as descriptive affixes. Thus English architecture might be divided into Saxon, Norman, Plantagenet, Edwardian, Lancas-

trian,[1] Tudor, and Elizabethan. Jacobean has been applied to the next variety, while that which follows, including the works of Inigo Jones and Wren, might be appropriately distinguished by the name of Stuart. Denominations of this sort admit of subdivisions to any extent. Thus the styles of the 1st, 2nd, or 3rd Edwards are sufficiently distinct to require separate names, though no technical term could point out exactly in what the difference consists. Even the styles of the beginning and end of the long reign of Edward III. require to be distinguished, and can easily be by this form of nomenclature, but can by no other yet proposed. So with the four Georges or the Stuarts, Lancastrian, Plantagenet, &c. The three Richards by a singular coincidence mark three ages of transition. Even without these adventitious advantages, a name so given marks the country and the age without fail, and describes the style with perfect correctness, without even suggesting the necessity of a system.

Another mode of attaining the same end has been partially adopted by the French, by giving the date instead of the dynasty: thus they speak of their styles of the 12th, 13th, or 14th centuries, and subdivide them into styles of the "first half," "second half," or commencement or middle of each of the centuries; a process as unobjectionable as the one above described, except in the circumlocution it requires, and the desirability of finding a single word if possible to express our meaning.

Whichever of these two last systems it may be thought most expedient to adopt, the great desideratum is obtained of a title which shall in the first place express the country where the style was practised and is found, and secondly the age to which it belongs. A third or technical title may be added to characterise it, but this is always unnecessary to any one at all acquainted with the subject; for when the country and age are known, the style is far more clearly suggested than it could be by any technical term drawn from one of its peculiarities.

In the following pages, therefore, the words Romanesque, Lombard, Rhenish, Norman, will be used like Spanish, Sicilian, or any other local name, only in the sense in which they are usually applied. The subdivisions as to time will be marked either by the date of the epoch or some king's or dynastic name which clearly marks it, and technical terms will be used as sparingly as possible, though such words as round-arched, or pointed Gothic, flamboyant, &c., seem unobjectionable and necessary to distinguish classes.

It is not perhaps necessary to say more on this subject here, as the development of these principles will naturally appear in the course of the work, and will be easily understood, as they involve no system. It is only therefore requisite to explain further in what order it is

[1] In writing the second volume of my 'True Principles of Beauty' in 1847 I adopted this mode of nomenclature exclusively. That book, however, never was published, and, in the meanwhile, Mr. Garbett has printed and published one in which the principles and most of the names given above are announced. The merit of the suggestion, if any, therefore belongs to him.

proposed to describe the styles of Christian art, and the principal names to be applied to them.

The first is most properly designated Romanesque, or modified—in this instance unfortunately debased—Roman. From the time of Constantine to that of Justinian it pervaded the whole empire, and no distinction can be drawn between the East and West sufficient to warrant their separation. Minute differences may be observed, constituting varieties—these are easily marked by secondary titles.

With Justinian a distinct separation takes place, the limits of which may be generally defined as follows:—If a line be drawn from the shores of the Adriatic to the shores of the Baltic, say from Fiume to Königsberg, it will divide Europe into two nearly equal portions; of these the eastern half is inhabited by Slaves, Huns, Servians, and other races, differing considerably from those to the westward, generally adhering to the Greek Church, and practising a style of architecture correctly called the Byzantine, which neither influenced nor was influenced by that of the West after the age of Justinian. To the westward of this line the case was very different: in those countries which had been the most populous and were most completely civilised under the Roman rule, the Romanesque style continued to be practised to a much later date than the 7th century—in Ravenna and Venice down to the 10th or 11th century, with the solitary but important exception of St. Mark's of Venice, the design of which certainly belongs to the East, with which that city was at that age more closely connected than with Rome. On the west coast, at Florence and Pisa, it continued to at least as late a date, and in the south of France it was practised till the 12th century at least, though with a difference sufficiently marked to obtain for it the distinguishing name of Romance or Provençal. In Spain too it continued, I believe, along the Mediterranean shore to as late a period; but that land is still architecturally almost unknown.

With the age of Charlemagne a new form of art arose, to which the general name of Gothic may be correctly applied, meaning thereby all those styles which were introduced by the barbarians who overthrew the Roman Empire. Acting at first under the direct influence of Rome, and afterwards guided by their own experience, they brought this style to that pitch of perfection which we still admire.

It has been objected to the name of Gothic that it was first used as a term of reproach, and is still often so used in common parlance; but it is never now so applied to architecture—it is therefore needless to regard this. Another and more important objection is that, though the Goths were one of the first invading tribes, they were insignificant in extent, and disappeared from the scene before the style attained anything like perfection. This would be fatal were we inventing a totally new system of nomenclature; but the term being in general use, and sufficiently expressing what we desire to express, it is better to take it than to supply an entirely new name. We would be understood therefore to apply architecturally the term Goth to all those Teutonic tribes of barbarians who overwhelmed the Roman Empire, and in the

dark ages established themselves within its boundaries. So defined, it will be found that, exactly in the ratio in which this barbarian element prevailed, the style of which we are speaking flourished in originality and beauty; but also that no other term or national name will comprehend all those various tribes and races who then occupied Europe. Teutonic, German, Frank, or Saxon, each exclude several great families of builders; and though Gothic may not be correct in an ethnographic point of view, if confined to architecture as above defined it can lead to no confusion, but on the contrary includes most appropriately not only the people, but the style they practised.

In adopting this extension of the term Gothic so as to apply it to the whole style, it may be requisite to distinguish between round-arched and pointed-arched Gothic, or, as it may be more succinctly expressed, between the Round and Pointed styles. Whatever term we use, this is indispensable; for Durham and York, Spires and Cologne are buildings of the same class, and must be regarded as belonging to one style: the mere introduction of the pointed arch is too trivial a difference to make such a separation as has hitherto been assumed to exist.

If it were desirable to establish a new name in lieu of Gothic, by far the best with which I am acquainted would be Feudal Architecture, as the style of which we are speaking arose with feudality, attained perfection with that system, and declined and expired with it. Moreover it existed in all those countries where the feudal system was introduced, and is found existing in those only, so that no name could be more appropriate or more correctly descriptive. The one apparent objection is that nine-tenths of the buildings we now find are ecclesiastical, and we generally apply this name only to secular institutions. The Church, however, in the middle ages was as essentially a part of the feudal system as the state itself, and bishops, abbots, and the lower grades of clergy, were as essentially peers and fiefholders as the barons with whom they were associated. It may at a future period be advantageous to introduce this new name, but at present it seems more expedient to adhere to the old one, with only the extension above alluded to.

Arrangement of Subject.

It is perhaps impossible to treat so extensive and so complicated a subject without some degree of repetition and confusion; but to avoid this as far as may be, it is proposed to take the Empire of Charlemagne as if it continued entire, treating France, Germany, and the North of Italy as one great architectural kingdom, as within this boundary we have the whole history of the art developed, and every peculiarity successively brought forward.

Regarding it in this light, Lombardy naturally takes the first place, as the part of the kingdom which was earliest civilised, and where the arts first attained any degree of consistency or perfection. Its history will be followed for the time in which it remained an indigenous Round-arched style.

From this the transition is easy to the German or Rhenish style, the valleys of the Po and of the Rhine forming in fact only two important divisions of the great Germanic Empire from the time of Charlemagne to the downfall of the Hohenstaufens, with whom also ended the Round-Gothic style of these two countries.

Contemporary with these, but differing in many essential respects, were the Round arched Gothic styles of France. These, though exceedingly and perplexingly various, never became so important as the Lombard or Rhenish; nor did any of them, except the styles of Auvergne and Normandy, acquire any very distinct individuality. Still they all possess considerable interest, and some of them show a degree of elegance almost unrivalled in that age, so that all must at least be mentioned and defined.

In speaking of the Pointed Gothic styles the course to be pursued is the reverse of this. There can now be no doubt but that the Pointed style was invented in France, and brought to a great degree of perfection there before the neighbouring countries took it up. So that, continuing the last chapter, we naturally pursue the thread of history, and, following it, have before us the whole history of the Gothic style before leaving the French soil.

After this it is easy to trace its introduction from France into Germany, and to point out the various modifications it underwent in that country. Few of these can be called improvements, though, from their being generally of the best age, and when architecture was almost suspended in France from the troubles of the country, the accidental result is that Germany possesses some Gothic buildings that may fairly rival many in France.

Again, the introduction of this style from France and Germany into Italy is easily traced and understood, and the various modifications it underwent there—none of which were improvements—are only too easily pointed out. We thus complete a perfect cycle of the art, tracing it from its origin back to the land of its birth, which was also that of its earliest decline, and where it first was superseded by the revival of the old Roman transitional style.

After this, it only remains to devote a separate chapter to each of the outlying styles not included in the above enumeration. First, to Sicily and Apulia, which present a strange admixture of Byzantine and Saracenic with Romanesque and Gothic feeling, indications of a confusion of races not found elsewhere.

Another chapter will include Spain and Portugal, where again we have an even stronger admixture of Saracenic art, giving to the Gothic of Spain a peculiar individuality of character which distinguishes it most essentially from those enumerated above.

From this we pass to Great Britain, where the history of the art is very similar to that of France; but at the same time exhibiting peculiarities well deserving of attention, and more interesting to us from their locality than almost any of those above pointed out.

Our enumeration concludes with Scandinavia, a country regarding which very little is yet known in an architectural point of view,

though its Round Gothic buildings are both numerous and interesting. In the Pointed style it has few buildings of importance, and these are so distinctly copies from the French, that little need be said about them.

And lastly, to avoid complicating the main subject, it may be necessary to devote short chapters to point out the peculiarities found in such countries as Holland and Pomerania, avoiding as far as possible too minute a subdivision, and only distinguishing those styles which can be defined by strongly-marked architectural peculiarities.

CHAPTER II.

ROMANESQUE STYLE.

CONTENTS.

Basilicas at Rome — Basilica of St. Peter — St. Paul's — Basilicas at Ravenna — Piacenza — Florence — Cathedral of Pisa — Torcello.

CHRONOLOGY.

	DATES.		DATES.
Honorius	A.D. 395	Liutprand, King of Lombardy	A.D. 712
Valentinian	425–435	Astolphus	749
Theodoric, King of the Ostrogoths	493–525	Desiderius	756
Justinian	527	Conquest by Charlemagne	774
Alboin Longimanus, King of Lombardy	568		

BASILICAS.

ONE of the most remarkable facts connected with the early history of the Christian religion is, that neither its founder nor any of his more immediate successors left any specific directions either as to the liturgical forms of worship to be observed by his followers, nor laid down any rules to be observed in the government of the newly established church. Under these circumstances it was left almost wholly to those to whose care the infant congregation was entrusted, to frame such regulations for its guidance as the exigencies of the occasion might dictate, and gradually to appoint such forms of worship as might seem most suitable to express the purity of the new faith, but at the same time with a dignity befitting its high mission.

In Judea these ceremonies, as might naturally be expected, were strongly tinctured with the forms of the Mosaic dispensation; but it appears to have been in Africa, and more especially in the pomp-loving and ceremonious Egypt, that fixed liturgies and rites first became an integral part of the Christian religion. In those countries far from the central seat of government, more liberty of conscience seems to have been attained at an early period than would have been tolerated in the capital. Before the time of Constantine they possessed not only churches, but a regularly established hierarchy, and a form of worship similar to what afterwards obtained throughout the whole Christian world. The form of government of the church, however, was long unsettled. At first it seems merely to have been, that the most respected individuals of each isolated congregation were selected to form a council to advise and direct their fellow-Christians, to receive and dispense their alms, and under the simple but revered title of Pres-

byters, to act as fathers rather than as governors to the scattered communities by which they were elected. The idea, however, of such a council naturally includes that of a president to guide their deliberations, and give unity and force to their decisions; and such we soon find springing up under the title of Bishops, or Presbyter Bishops, as they were first called. During the course of the second century the latter institution seems gradually to have gained strength at the expense of the power of the presbyters, whose delegate the bishop was assumed to be. In that capacity they not only took upon themselves the general direction of the affairs of the church, but formed themselves into separate councils and synods, meeting in the provincial capitals of the provinces where they were located. These meetings took place under the presidency of the bishop of the city in which they met, who thus assumed to be the chief or metropolitan. They thus formed a new presbytery above the older institution, which was thus gradually superseded—to be again surpassed by the great councils of the church, which after the age of Constantine formed the supreme governing body of the church; performing the functions of the earlier provincial synods with more extended authority, though with less unanimity and regularity, than had characterised the earlier institution.

It was thus that during the first three centuries of its existence the Christian community was formed into a vast Federal republic, governed by its own laws, administered by its own officers, acknowledging no community with the heathen, and no authority in the constituted secular powers of the state. But at the same time they admitted a participation of rights to the body of the faithful, from whom the hierarchy were chosen, and whose delegation was still admitted to be their title to office.

When in the time of Constantine this persecuted and scattered church emerged from the catacombs to bask in the sunshine of imperial favour, it was impossible that any buildings could be found more suited for their purposes than the basilicas of ancient Rome. They were designed and erected for the convenient transaction of the affairs of the heathen Empire, and were in consequence eminently suited for the convenience of the Christian republic, which then aspired to supersede its fallen rival and replace it by a younger and better institution.

In the basilicas the whole congregation of the faithful could meet and take part in the transaction of the business going on. The bishop naturally took the place previously occupied by the prætor or quæstor, the presbyters those of the assessors. The altar in front of the apse, where the pious heathen poured out libations at the commencement and conclusion of all important business, served equally for the celebration of Christian rites, and with the fewest possible changes either in the form of the ceremonies, or of the nature of the business transacted therein, the basilica of the heathen became the ecclesia or place of assembly of the early Christian community.

At this early age there seems to be every reason to believe, that the round church which usually stood by itself near the west end of

the basilica, was the ceremonial, or properly speaking, liturgical church of the community. It was certainly there that the most solemn and important rite, that of baptism, was always administered, whence it derived its name of *Baptistery*. These were also the tombs of important persons; and being copied from the tombs of the Romans, it is almost certain that the service of the dead, and the last sacrament, were here administered; and as a general rule all the sacraments, so far as we can trace them, belonged then to the circular building as contradistinguished from the ecclesia or place of assembly.

These arrangements were not long allowed to continue as we have described them: for the now dominant hierarchy of Rome soon began to repudiate the republicanism of the early days of the church, and to adopt from the East the convenient doctrine of the absolute separation of the congregation into clergy and laity. To accommodate the basilica to this new state of things, first the apse was railed off and appropriated wholly to the use of the clergy; then the whole of the dais, or raised part in front of the apse on which the altar stood, was separated by pillars, called cancelli, and in like manner given up wholly to the clergy, and not allowed to be profaned by the presence of the unordained multitude.

The last great change was the introduction of a choir, or enclosed space in the centre of the nave, attached to the bema or *presbytery*, as the raised space came to be called—round three sides of which the faithful were allowed to congregate to hear the Gospels or Epistles read from the two pulpits or *ambones*, which were built into its enclosure on either side; or to hear the services which were read or sung by the inferior order of clergy who occupied its precincts.

The enclosure of the choir was kept low, so as not to hide the view of the raised presbytery, or to prevent the congregation from witnessing the more sacred mysteries of the faith which were there performed by the higher order of clergy.

Another important modification, though it introduced no architectural change, was the introduction of the bodies of the saints in whose honour the building was erected, into the basilica itself, and placing them in a confessional or crypt below the high altar.

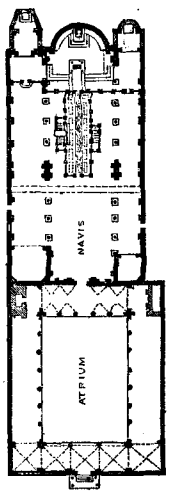
There is every reason to believe that a separate circular building, or proper tomb, was originally erected over the grave or place of martyrdom, and the basilica was sanctified merely by its propinquity to the sacred spot. Afterwards the practice of depositing the relics of the saint beneath the floor became universally the rule. At about the same time the baptistery was also absorbed into the basilica; and instead of standing opposite the western entrance, a font placed within the western doors supplied its place. This last change was made earlier at Rome than elsewhere. It is not known at what exact period the alteration was introduced, but it is probable that the whole was completed before the age of Gregory the Great.

It was thus that in the course of a few centuries the basilicas aggregated within themselves all the offices of the Roman church, and became the only ecclesiastical buildings they acknowledged—either as places

for the assembly of the clergy for the administration of the Sacraments and the performance of divine worship, or for the congregation of the faithful.

San Clemente.

Among the numerous basilicas of Rome no one retains at the present day the arrangements above described in the same state of completeness as that of San Clemente, erected in the 4th and 5th centuries on the site of the house of that saint. Though rebuilt in the 9th century, and subsequently repaired, it still retains in nearly a complete state all the ordinances of an original church of this class.



365. Plan of the Church of San Clemente at Rome. From Gutensohn and Knapp.[1] Scale 100 ft. to 1 inch.

It is one of the few that still possess an *Atrium* or court-yard in front of the principal entrance, though there can be little doubt but that this was considered at that early age a most important, if not indeed an indispensable, attribute to the church itself. As a feature it may have been derived from the East, where we know it was most common, and where it afterwards became, with only the slightest possible modifications, the mosque of the Moslems. It would seem even more probable, however, that it is only a repetition of the *forum*, which always was attached to the Pagan basilica, and from which it was always entered; and for a sepulchral church at least nothing could be more appropriate, as the original application of the word forum seems to have been to the open area that existed in front of tombs as well as other important buildings.[2]

In the centre of this atrium there generally stood a fountain or tank of water, not only as an emblem of purity, but that those who came to the church might wash their hands before entering the holy place—a custom which seems afterwards to have given rise to the practice of dipping the fingers in the holy water of the piscina, now universal in all Catholic countries.

The colonnade next the church was frequently the only representative of the atrium, and then—perhaps indeed always—was called the *narthex*, or place for penitents or persons who had not yet acquired the right of entering the church itself.

From this narthex 3 doorways open into the church, corresponding with the 3 aisles; and had there been a font, it ought to have been placed in a chapel on either the right or left hand of the principal entrance.

The choir with its 2 pulpits is shown in the plan—that on the left-hand side being the pulpit of the epistle, that on the right of the gospel. The railing of the *bema* or presbytery is also marked, so is

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[1] Gutensohn und Knapp, Die Basiliken des Christlichen Roms.

[2] Cicero de Legg., ii. 24; Festus, s. v.; Smith's Dictionary of Classical Antiquities.

the position of the altar with its canopy supported on 4 pillars, and behind that the throne of the bishop, with the seats of the inferior clergy surrounding the apse on either side.

Besides this church there are at least 30 other basilican churches in Rome, extending in date from the 4th to the 14th century. Their names and dates, as far as they have been ascertained, are set forth in the accompanying list, which, though not altogether complete, is still the best we possess, and sufficient for our present purposes.[1]

BASILICAS OF ROME.

FOURTH CENTURY.

ST. PETER'S	Constantine (5 aisled)	about 330
ST. PAUL'S	Theodosius and Honorius (5 aisled)	386

FIFTH CENTURY.

STA. SABINA	Pope Celestine	about 425
STA. MARIA MAGGIORE	Pope Sixtus III.	432
ST. PIETRO AD VINCULA	Eudoxia (Greek Doric pillars)	442

SIXTH CENTURY.

SAN LORENZO (old part)	Pope Pelagius (galleries)	580
STA. BALBINA	Gregory the Great (no side aisles)	600

SEVENTH CENTURY.

STA. AGNESE	Honorius I. (galleries)	625
QUATTRO CORONATI	Honorius I.	625
ST. GIORGIO IN VELABRO	Leo II.	682
SAN CHRISOGONO	Gregory III.	730

EIGHTH CENTURY.

S. GIOVANNI A PORTA LATINA	Hadrian I.	790?
S. MARIA IN COSMEDIN		790
S. VINCENZO ALLE TRE FONTANE		790
S. LORENZO (nave)		about 790?

NINTH CENTURY.

SS. NEREO ED ACHILLEO.	Leo III.	about 800
S. PRAXEDE	*Paschal I.*	*820*
S. MARIA IN DOMINICA		*820*
S. MARTINO AI MONTI	*Sergius and Leo*	*844, 855*
S. CLEMENTE	*John VIII.*	*872*
S. NICOLO IN CARCERE		*about 900*
S. BARTOLOMEO IN ISOLA		*900*

TENTH CENTURY.

S. GIOVANNI IN LATERANO	Sergius III.	910

ELEVENTH CENTURY.

Nothing.

[1] It is copied from the work of the Chevalier Bunsen on the Roman Basilicas, which, with the illustrations of Gutensohn and Knapp, forms by far the best work on the subject that has yet been given to the world.

TWELFTH CENTURY.

S. Maria in Trastevere	Innocent II.	1135
S. Croce	Lucius.	1144
S. Maria in Ara Celi		uncertain

THIRTEENTH CENTURY.

Nothing.

FOURTEENTH CENTURY.

S. Maria sopra Minerva	Gothic	about 1370

FIFTEENTH CENTURY.

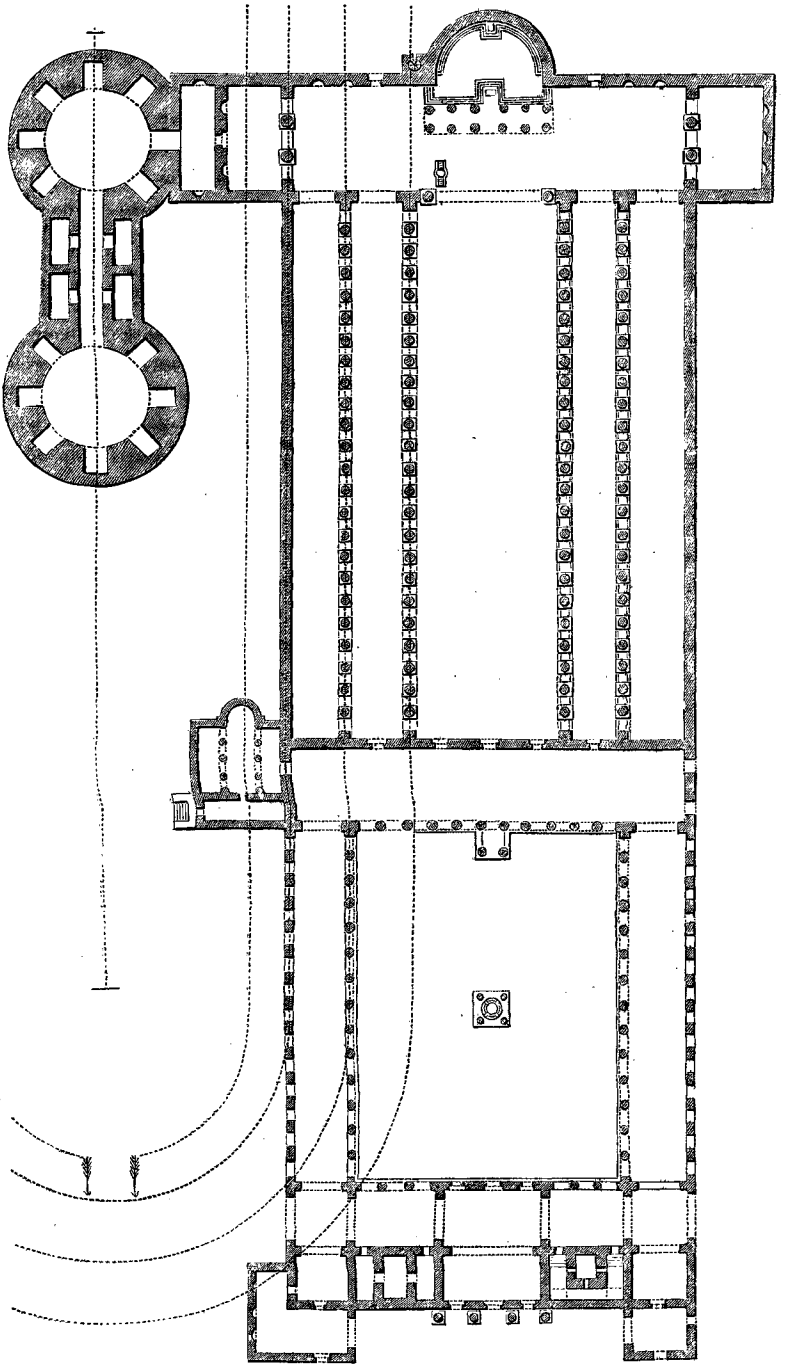
S. Agostino	Renaissance?	about 1480

Of these, three, St. Peter's, St. Paul's, and the Lateran church, have 5 aisles, all the rest 3, with only one insignificant exception, Sta. Balbina, which has no side-aisles. Two, Sta. Agnese and the old part of St. Lorenzo, have their side-aisles in two stories, all the rest are only one story in height, and the side-aisles generally are half the width of the central aisle or nave. Some of the more modern churches have the side-aisles vaulted, but of those on the list all except the two last have flat wooden ceilings over the central compartment, and generally speaking the plain unornamental construction of the roof is exposed. It can scarcely be doubted that originally they were ceiled in some more ornamental manner, as the art of ornamenting this new style of open construction seems to have been introduced at a later date.

Of the two last named, the Sta. Maria sopra Minerva might perhaps be more properly classed among the buildings belonging to the Italian Gothic style; but as it is the only one in Rome that has any claim to such a distinction, it is hardly worth while making it an exception to the rest. The San Agostino might also be called a Renaissance specimen. It certainly is a transitional specimen between the pillared and pilastered styles, which were then struggling for mastery. It may either be regarded as the last of the old race or the first of the new style, which was so soon destined to revolutionise the architectural world.

Of the remaining examples the oldest was the finest. This great basilica was erected in the reign of Constantine, close to the circus of Nero, where tradition affirmed that St. Peter had suffered martyrdom. It unfortunately was entirely swept away to make room for the greatest of Christian temples, which now occupies its site; but previous to its destruction careful measurements and drawings were made of every part, from which it is easy to understand all its arrangements—easier perhaps than if it had remained to the present day, and four centuries more of reform and improvements assisted in altering and disfiguring its venerable frame.

As will be seen from the plan (woodcut No. 366), drawn to the usual scale, it possessed a noble atrium or forecourt, 212 ft. by 235, in front of which were some bold masses of building which during the



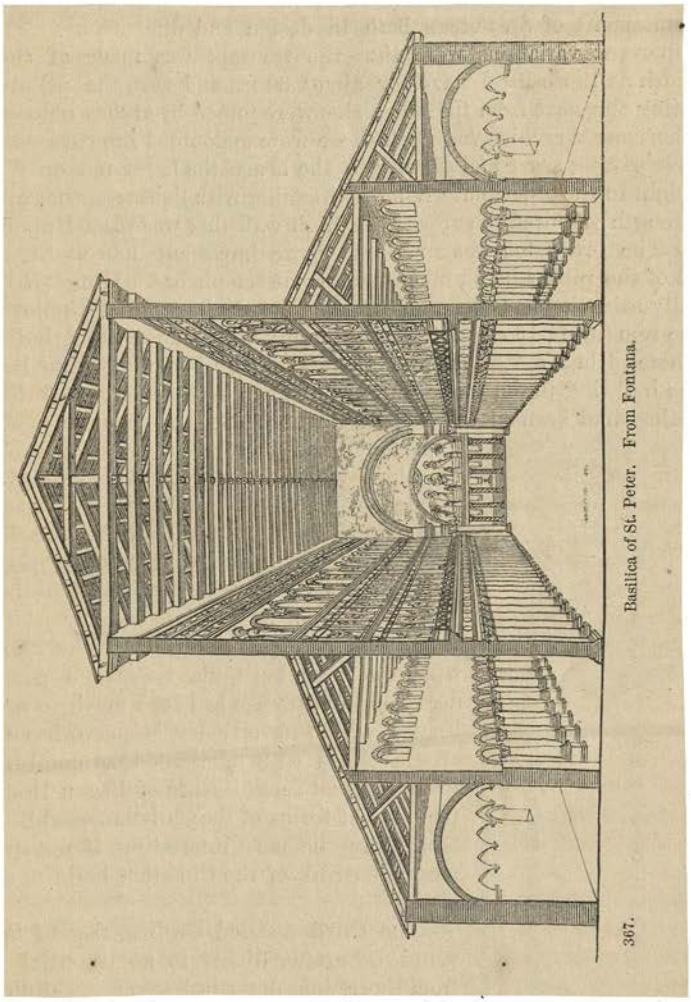
366. Plan of the original Basilica of St. Peter at Rome. From Gutensohn and Knapp. Scale 100 ft. to 1 in.

middle ages were surmounted by 2 belfry-towers. The church itself was 212 ft. in width by 395 in length, covering an area of 114,000 English feet, which, though only half the size of the present cathedral, still is a greater space than is covered by any mediæval cathedral except those of Milan and Seville, with which it ranks in size. The central aisle was about 80 ft. across (about twice the average width of a Gothic nave), and nearly the same as that of the basilica of Maxentius and the great halls of the greater Thermæ. For some reason or other this dimension seems to have been a modulus very generally adopted. The bema or sanctuary, answering to the Gothic transept, extended beyond the walls of the church either way, which was unusual in Romanesque buildings. The object here seems to have been to connect it with the tombs on its north side. The arrangement of the sanctuary was also peculiar, having been adorned with 12 pillars supporting a gallery. These, when symbolism became the fashion, were said to represent the 12 apostles. This certainly was not their original intent, as at first only 6 were put up—the others added afterwards. The sanctuary and choir were here singularly small and contracted, as if arranged before the clergy became so numerous as they afterwards were, and before the laity were excluded from this part of the church.

The two most interesting adjuncts to this cathedral are the two tombs standing to the northward. According to the mediæval tradition the one was the tomb of Honorius and his wives, the other the church of St. Andrew. Their position, however, carefully centred on the spina of the circus of Nero, where the great apostle suffered martyrdom, seems to point to a holier and more important origin. My own conviction is that they were erected to mark the places where the apostle and his companions suffered. It is besides extremely improbable that after the erection of the basilica an emperor should choose the centre of a circus for the burying-place of himself and his family, or should be permitted to choose so hallowed a spot. They are of exactly the usual tomb-form of the age of Constantine, and of the largest size, being each 100 ft. in diameter.

The general internal appearance of the building will be understood from the following woodcut (No. 367), which presents at one view all the peculiarities of the basilican buildings. The pillars separating the central from the side aisles appear to have been of uniform dimensions, and supported a horizontal entablature, above which rose a double range of panels, each containing a picture—these panels thus taking the place of what was the triforium in Gothic churches. Over these was the clerestory, and again an ornamental belt gave sufficient elevation for the roof, which in this instance showed the naked construction. On the whole perhaps the ratio of height to width is unexceptionable, but the height over the pillars is so great that they are made to look utterly insignificant, which indeed is the great defect in the architectural design of these buildings, and, though seldom so offensive as here, is apparent in all. The ranges of columns dividing the side aisles were joined by arches, which is a more common as well

as a better arrangement, as it not only adds to the height of the pillars, but gives them an apparent power of bearing the superstructure. At some period during the middle ages the outer aisles were vaulted, and Gothic windows introduced into them—a change which seems to have necessitated the closing of the intermediate range of clerestory windows, which probably was by no means conducive to the general architectural effect of the building.



Basilica of St. Peter. From Fontana.

367.

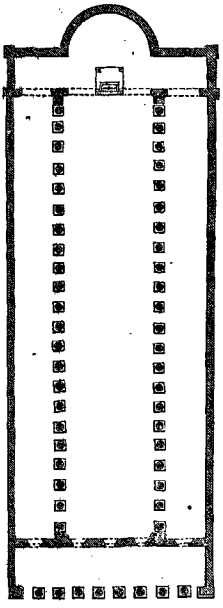
Externally this basilica, like all those of its age, must have been singularly deficient in beauty or in architectural design. The sides were of plain unplastered brick, the windows were plain arch-headed openings. The front alone was ornamented, and this only with two ranges of windows somewhat larger than those at the sides, 3 in each tier, into which tracery was inserted at some later period, and between

and above these, various figures and emblems were painted in fresco on stucco laid on the brickwork. The whole was surmounted by that singular coved cornice which seems to have been universal in Roman basilicas, though not found anywhere else that I am aware of.

St. Paul's.

The church of St. Paolo fuori delle Mura was almost an exact counterpart of St. Peter's both in design and dimensions. The only important variations were that the transept was made of the same width as the central nave, or about 80 ft., and that the pillars separating the nave from the side aisles were joined by arches instead of by a horizontal architrave. Both these were undoubted improvements, the first giving space and dignity to the bema, the latter not only adding height to the order, but giving it, together with lightness, that apparent strength required to support the high wall that was placed upon it.

The order too was finer and more important than at St. Peter's, 24 of the pillars being taken from some temple or building (it is generally said the mausoleum of Hadrian) of the best age of Rome, though the remaining 16 are unfortunately only very bad copies of their forms. These pillars are 33 ft. in height, or one-third of the whole height of the building to the roof. In St. Peter's they were only a fourth, and if they had been spaced a little farther apart, and the arch made more important, the most glaring defect of these buildings would in a great measure have been avoided.

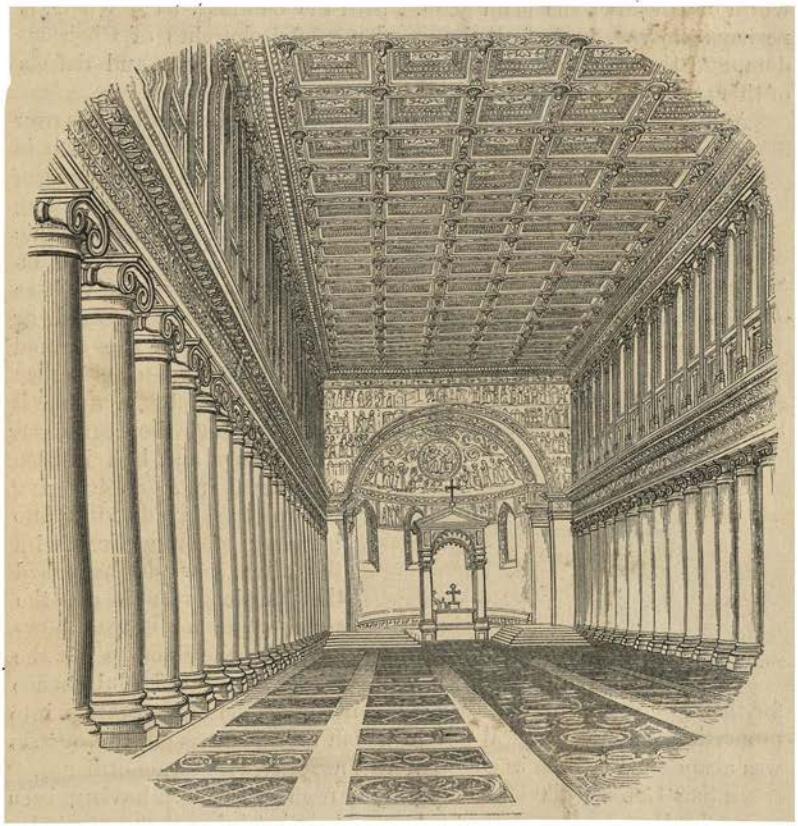


368. Plan of Sta. Maria Maggiore. Scale 100 ft. to 1 in.

Long before its destruction by fire in 1822 this church had been so altered as to lose many of its most striking peculiarities. The bema or presbytery was divided into two by a longitudinal wall. The greater number of its clerestory windows were built up, its atrium gone, and decay and whitewash had done much to efface its beauty, which nevertheless seems to have struck all travellers with admiration, as combining in itself the last reminiscence of Pagan Rome with the earliest forms of the Christian world. It certainly was the most interesting, if not quite the most beautiful, of the Christian buildings of that city.

The third 5-aisled basilica, that of San Giovanni Laterano, differs in no essential respect from those just described except in dimensions, covering only about 60,000 ft., and consequently scarcely more than half the space occupied by the others. It has been so completely altered in modern times that its primitive arrangements can now hardly be discerned, and certainly its effects, if any were peculiar to it, cannot now well be judged of.

Of those with 3 aisles by far the finest and most beautiful is that of Sta. Maria Maggiore, which, notwithstanding the comparative smallness of its dimensions, is now perhaps the best specimen of its class remaining. Internally its dimensions are 100 ft. in width by 250 to the front of the apse; the whole area about 32,000 ft.: so that it is little more than half the size of the Lateran church, and between one-third and one-fourth of the two older churches.



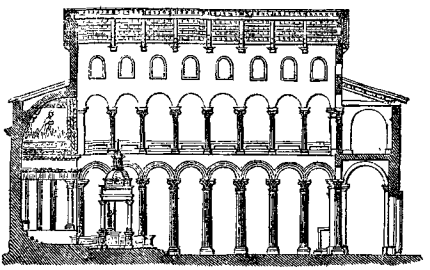
369. View of Sta. Maria Maggiore. From Gutensohn and Knapp.

Notwithstanding this there is great beauty in its internal colonnade, all the pillars of which are of one design, and bear a most pleasing proportion to the superstructure. The clerestory too is ornamented with pilasters and panels, so as to make it a part of the general design; and with the roof, which is panelled with constructive propriety and simplicity combined with sufficient richness, serves to make up a whole, giving a far better and more complete idea of what a basilica either was originally, or at least might have been, than any other church at Rome. It is true that both the pilasters of the clerestory and the roof are modern, and in modern times the colonnade has been broken

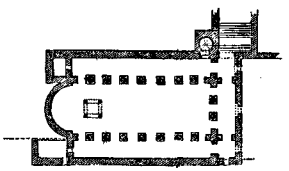
through in two places; but these defects must be overlooked in attempting to judge of the whole.

Another defect is that the side aisles have been vaulted in modern times, and in such a manner as to destroy the harmony that should exist between the different parts of the building. In striving to avoid the defect of making the superstructure too high in proportion to the columns, the architect has made the central roof too low either for the width or length of the main aisle. Still the building, as a whole, is perhaps the very best of all the wooden roofed churches of Christendom, and the best model from which to study the merits and defects of this style of architecture.

Another mode of getting over the great defect of high walls over the pillars was adopted in Sta. Agnese and St. Lorenzo, of using a gallery corresponding with the triforium of Gothic churches. In both these instances it seems to have been suggested, if not required, by the peculiarity of the ground being higher on one side than on the other; but whether it was so or not, the result was most happy, and had it been persevered in, so as to bring the upper colonnade more into harmony of proportion with the other, it would have had the happiest results on the style. Whether it was, however, that the Romans felt the want of the broad plain space for their paintings, or that they could not bring the upper arches into proportion with the classical pillars which they made use of, the system was abandoned as soon as adopted, and never came into general use.



370. Section of Sta. Agnese. From Gutensohn and Knapp. Scale 50 ft. to 1 in.



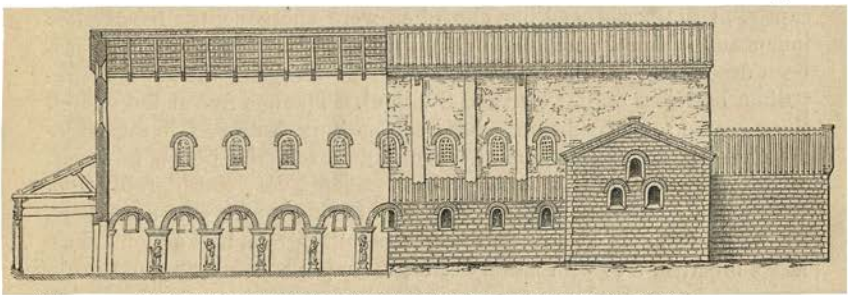
371. Plan of Sta. Agnese. Scale 100 ft. to 1 in.

In San Lorenzo the effect is spoiled, from that church having been so much altered when the nave was added that it is not easy to judge of the original design; and the whole being made up of incongruous fragments of classical buildings, it has a piecemeal appearance very prejudicial to architectural effect.

In some instances, as in San Clemente, above alluded to, in San Pietro in Vincula, and Sta. Maria in Cosmedin, the colonnade is divided into spaces of three or four intercolumniations by blocks of solid masonry, which give great apparent solidity and strength to the building, but at the expense of dividing it into three compartments, more than is agreeable, and destroying that beauty of perspective which is so pleasing in a continuous colonnade. This defect seems to have been felt in the Santa Praxede, where these blocks are placed angularly, and support each a bold arch thrown across the central aisle. The

effect of this might have been most happy, and is so at San Miniato, near Florence; but is so clumsily managed here, as to be most destructive of all beauty of proportion.

Some of the principal beauties as well as some of the most remarkable defects of these basilican churches arise from the employment of columns torn from ancient temples: where this has been done, the beauty of the marble, and the exquisite sculpture of the capitals and friezes, give a richness and elegance to the whole that goes far to redeem or to hide the rudeness of the building in which they are encased. But on the other hand, the discrepancy between the pillars, Doric, Ionic, and Corinthian columns being sometimes used side by side, destroys all uniformity, and the fragmentary character of the entablatures they support is still more prejudicial to the continuity of the perspective, which is the greatest charm of these churches. By degrees, the fertile quarries of ancient Rome seem to have become entirely exhausted; and as the example of St. Paul's proves, the Romans in the 4th century were incapable of manufacturing even a bad imitation—they were at last forced to adopt some new plan of supporting their arcades. The church of SS. Nereo ed Achilleo is, perhaps, the most elegant example of this class, the piers being light octagons; but the most characteristic, as well as the most original, is the San Vincenzo alle Tre Fontane, shown in section and elevation in the woodcut, No. 372. It so far deviates from the usual basilican arrange-



372. Half Section, half Elevation, of the Church of San Vincenzo alle Tre Fontane. From Gutensohn and Knapp. Scale 50 ft. to 1 in.

ments as almost to deserve the appellation of Gothic. It has the same defect as all the rest—its pier arches being too low, for which there is no excuse here; but both internally and externally it shows a uniformity of design and a desire to make every part ornamental that produces a very pleasing effect, although the whole is merely of brick, and ornament is so sparingly applied as only just to prevent the building sinking to the class of mere utilitarian erections.

One of the most pleasing architectural features, if I may so call it, of these churches, are the mosaic pavements that adorn the greater number. These were always original, being designed for the buildings in which they are used, and following the arrangement of the architecture that stands on them. The patterns too are always elegant, and appropriate to the purpose; and as the colours are in like manner

generally harmoniously blended, they form not only a most appropriate but most beautiful basement to the architecture.

A still more important feature was the great mosaic pictures that always adorned the semi-dome of the apse, representing most generally the Saviour seated in glory surrounded by saints, or some scene from the life of the holy personage to whom the church was dedicated. These mosaics were generally continued lower down to nearly the level of the altar, and along the whole of the inner wall of the sanctuary in which the apse was situated—as far as the triumphal arch which separated the nave from the sanctuary. At this point the mosaic blended with the frescos that adorned the upper walls of the central nave above the arcades. All this made up an extent of polychromatic decoration, which in those dark ages, when few could read, the designers of these buildings seem to have considered as virtually of more importance than the architectural work to which it was attached. Any attempt to judge of the one without taking into consideration the other, is pronouncing on hearing only half the evidence; but taken in conjunction, the paintings go far to explain, and also to redeem, many points in which the architecture is most open to criticism.

RAVENNA.

During the whole period when the Romanesque style was most flourishing, the city of Ravenna almost rivalled in importance the old capital of the world, and her churches were consequently hardly less important either in number or in richness than those we have just been describing. It is true she had none so large as the great metropolitan basilicas of St. Peter and St. Paul. The one five-aisled church she possessed—the cathedral—has been entirely destroyed, to make way for a very contemptible modern erection. From the plans, however, which we possess of it, it seems to have differed very considerably from the Roman examples, most especially in having no trace of a transept, the building being a perfectly regular parallelogram, half as long again as its breadth, and with merely one great apse added at the end of the central nave. Its loss is the more to be regretted, as it was, besides being the largest, the oldest church in the city, having been erected about the year 400, by Archbishop Ursus. The baptistery that belonged to it has been fortunately preserved, and will be described hereafter.

Besides a considerable number of other churches, which have either been lost or destroyed by repair, Ravenna still possesses two first class 3-aisled basilicas,—the San Apollinare Nuovo, originally an Arian church, built by Theodoric, king of the Goths (A.D. 493-525); and the S. Apollinare ad Classem, at the Port of Ravenna, situated about 3 miles from the city, commenced A.D. 538, and dedicated 549. They are both similar in plan, in as far at least as their naves are concerned, and apparently so in dimensions.[1]

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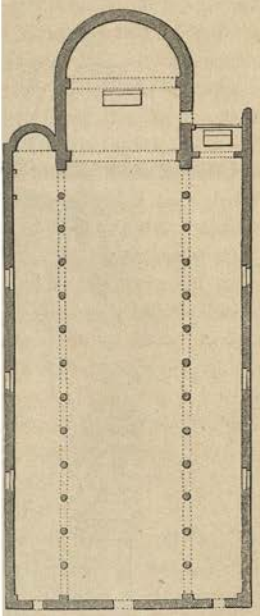
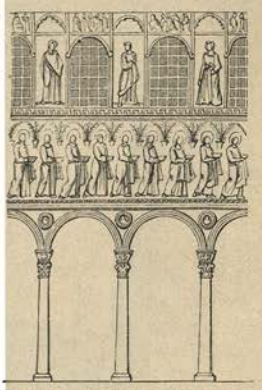
[1] None of the plans to which I have access have scales: I therefore do not know what the dimensions of these churches are. I may as well mention here that when I assert that plans have no scales, I am not ignorant that, as in this instance, such authors

S. Apollinare Nuovo is now called S. Martino in Cielo d'Oro, from its having been decided in the 12th century that the other church, ad Classem, possessed the true body of the saint to whom both churches were dedicated. As will be seen from the plan, woodcut No. 373, it was a regular basilica, with 12 pillars on each side. It has no transepts, but in their place a rectilinear compartment inserted in front of the apse, which serves the same purpose. This portion seems more like the modern chancel than anything else we know of at so early a date. This feature is not found in the sister church. The great merit of these two basilicas as compared with those of Rome, arises from the circumstance of Ravenna having possessed no ruined temples whose spoils could be used in the construction of new buildings. Consequently the architects being obliged to think for themselves and design every detail, introduced a degree of harmony into their proportions utterly unknown in the Roman examples. From the woodcut No. 374, representing three arches of the nave of S. Apollinare Nuovo, it will be seen that the pillars are pleasingly spaced; their capitals, surmounted by a block representing the architrave, suffice for the support of the arches that spring from them; the triforium belt is adorned with figures, and is of pleasing proportion; and the window over each arch fills up the remaining height to the roof, without either overcrowding or leaving any space that is not easily filled up by the decorations applied. It is true the parts do not all quite harmonize, but it is an immense stride in advance of the Roman style. All this is still more apparent in the next woodcut, taken from the angle where the nave joins the apse in the Apollinare ad Classem, which shows a still further advance towards forming a new style out of the classical elements: a little more and the transition would be almost complete. It is still easy, however, not only to trace the derivation of every detail from the classical



373. Church of S. Apollinare in Classe, Ravenna. From Agincourt. No scale.



374. Arches in Church of San Apollinare Nuovo. From Quast.[1]

as Canina, Wiebeking, &c., have copied and enlarged Agincourt's plans, and put scales to them, with the utmost appearance of exactness; but in nine cases out of ten these scales are mere figments of the author's brain.

[1] A. F. von Quast, Die Altchristlichen Bauwerke von Ravenna.

375. Part of Apse in S. Apollinare in Classe, Ravenna. From Quast.

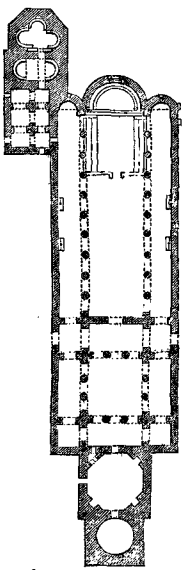
376. S. Apollinare ad Classem, Ravenna. From Quast.

model, but also to see that the architect was trying to adhere to that style as far as his means and his purposes would allow.

Externally these buildings seem to have still remained almost wholly without architectural embellishment. It was considered sufficient to make the brick arches necessary for the construction slightly more prominent and important than was actually required. As if impelled by some feeling of antagonism to the practice of the heathens, the early Christians seem to have tried to make the external appearance of their buildings as unlike those of their predecessors as it was possible. Whether this was the cause or not, it is certain that nothing can well be less ornamental than these exteriors; and even the *narthex*, which in this instance afforded an excellent opportunity for embellishment, could not be less ornamental if it were to lead into a barn instead of a church of such richness and beauty as this one possesses in its internal arrangement.

PARENZO.

At Parenzo in Istria there is a basilica, built in the year 542 by the Bishop Euphrasius, and consequently contemporary with these examples at Ravenna. This church possesses its atrium, baptistery, and other accompaniments, which those at Ravenna have lost. It consists of a basilica in three aisles, with an apse at the end of each, and an atrium in front, beyond which is situated the baptistery; and in front of this again a tower, with a circular chamber in it. On one side at the east end is a chapel or crypt; but it is by no means clear to what age it belongs, and for what purpose it was erected. It seems an excrescence, while all the other parts belong to the original design. It is a little out of the beaten track, and the only illustration of it which we possess is the plan in Agincourt's great work; and there, as is too often the case, it is without scale or dimensions mentioned in the text. As a building of the age of Justinian, and showing the relative position of the various parts that made up an ecclesiastical establishment in these early times, it is singularly deserving of the attention of those to whom the history of art is a matter of interest.



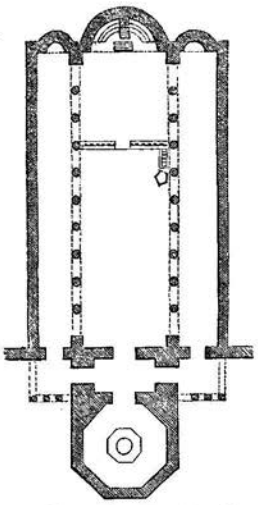
377. Church at Parenzo in Istria. From Agincourt.

TORCELLO.

Scarce less interesting is the basilica of Torcello in the Venetian Lagune, built in the first year of the 11th century.[1] Like Parenzo, it is one of those buildings that neither artists nor architects will look

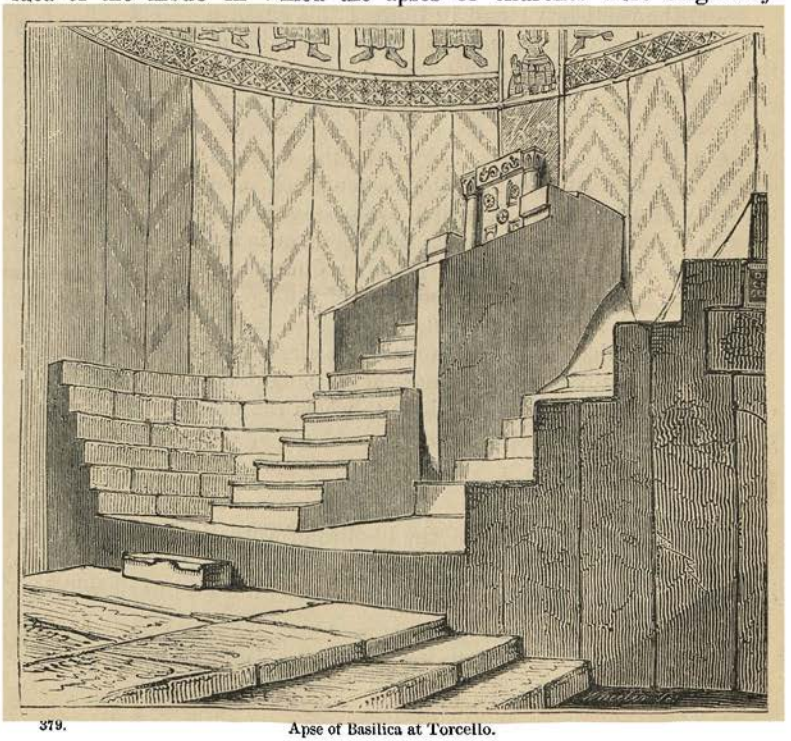
[1] An older church, belonging to the 7th century, existed on the spot where this now stands. It is uncertain how far the present erection takes the form or arrangement of the older edifice.

at. No church, however, of its age, probably possesses in such perfection the basilican arrangement as this, at least at so late an age. As will be seen from the woodcut No. 378 (from Agincourt's work), it is a simple basilica, with 9 pillars on each side of the nave, and 3 apses; the two smaller on each side of the larger one being the only thing that can be called an innovation on the old arrangement. Its most striking peculiarity, however, is the position of the baptistery, which, instead of being separated from the church by an atrium, as was usually the case, is only divided from it by a narrow passage. It is evident that it only required one slight step further to convert this into a double apse cathedral such as are found so commonly in Germany.



378. Plan of Church at Torcello. From Agincourt. No scale.

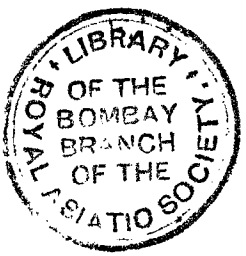
The most interesting part of this church is the interior of its apse, which still retains the bishop's throne, surrounded by 6 ranges of seats for his presbytery, arranged like those of an ancient theatre. It presents one of the most extensive and best preserved examples of the fittings of the apse, and gives a better idea of the mode in which the apses of churches were originally



379. Apse of Basilica at Torcello.

arranged, than anything that is to be found in any other church, either of its age or of an earlier period.

The architectural history of Italy is nearly a blank during the four centuries that elapsed between the building of the basilicas of Parenzo and Torcello. This is only too easily to be accounted for from the irruption of the barbarians, and the troubled state of all political relations during these truly dark ages. This may account for the style reappearing at Torcello with so little change from what is found at Ravenna and Parenzo, after so long a lapse of time, and side by side with the celebrated church of St. Mark's, of Venice, which alone of all Italian churches can fairly be called a direct importation from the East. Still we should by no means despair of being able to fill up the gap to a considerable extent from among the smaller and more obscure churches of towns lining the shores of the Adriatic; no systematic survey has yet been attempted for this purpose, and the slight glimpses of knowledge that we here and there possess, serve only to indicate the permanence of the forms throughout the whole of that dark period.

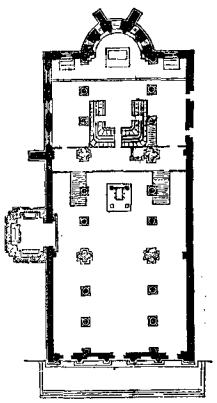

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CHAPTER III.

LATER ROMANESQUE.

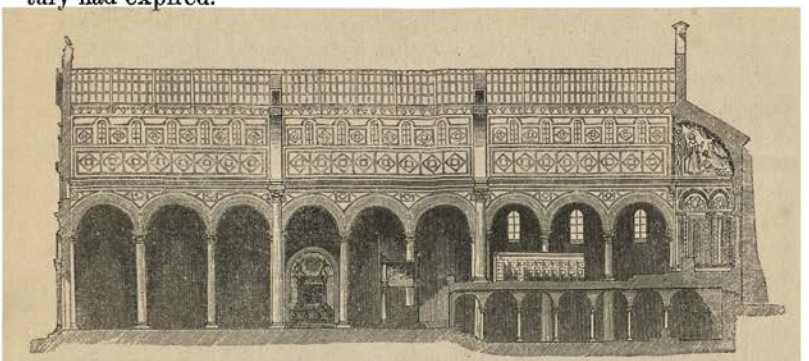
On turning to the other side of Italy, we find no city like Ravenna that took up the style within the first few centuries after the age of Constantine, so as to enable us to connect the past with the more certain traces of the middle ages. Florence was then, it is true, a city, and no doubt possessed churches; but they were small as compared with those on the east coast, and during her time of greatest prosperity, which was long afterwards, these ancient churches were all rebuilt, or so repaired as to leave scarcely a trace of their original forms. Hence the history of Romanesque architecture hardly begins on this side of Italy before the 11th century. At this period of returning prosperity, we find several churches of great beauty and importance retaining all the peculiarities of the true Romanesque style, with only so slight a trace of Gothic feeling as merely to show that in the interval the Lombards had penetrated to these shores, and left an impress of their existence there, but so slight as soon to be obliterated by the older civilisation which the new was then incapable of superseding.

Of these churches, one of the most beautiful as well as most perfect specimens is that of S. Miniato, near Florence, a small basilica without transepts, commenced in the year 1013, and therefore, as nearly as may be, contemporary with the Duomo at Torcello. Internally it is only 165 ft. by 70 in breadth, divided into three aisles, and longitudinally into three compartments, by clustered piers supporting two great arches which span the nave and aisles. This coupling of the piers is the only real Gothicism in the building, and is one of the very earliest instances of a practice which afterwards became so important an element in the new style of art, by giving the power of using piers of any required degree of solidity, combined at the same time with almost as much appearance of lightness as a single shaft would possess. The arches that span the nave may also be considered as a first timid attempt at vaulting the nave. It is true, the same thing had been attempted in Rome, in the Sta. Praxede, two centuries earlier, but so clumsily that it was at once abandoned. Here, by a little contraction of the pier arches and the introduction of another compound pier, the roof would have been divided into 3



380. Plan of San Miniato, Florence. From Gailhabaud's Monumens Anciens et Modernes.
Scale 100 ft. to 1 in.

squares, which a bold builder would willingly have undertaken to vault, a task which was undertaken and accomplished before the century had expired.



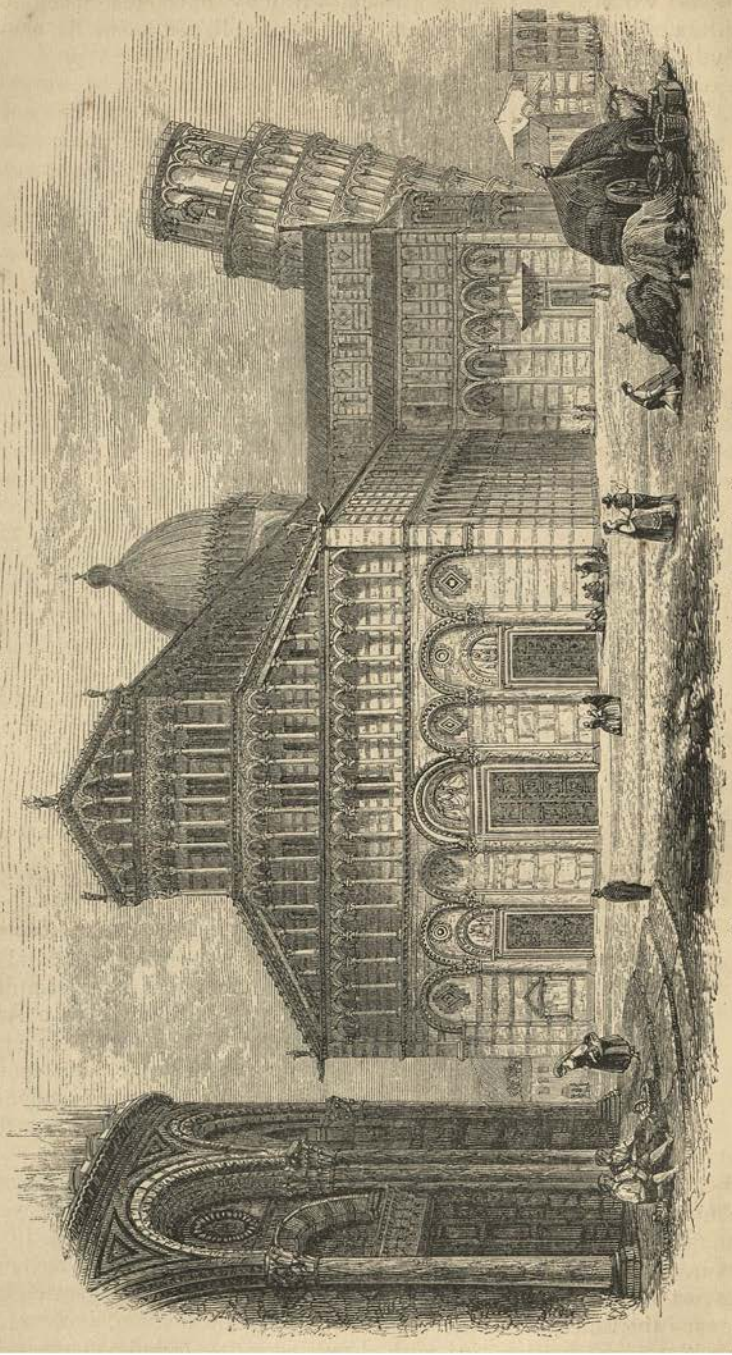
381. Section of San Miniato, near Florence. From Gailhabaud. Scale 50 ft. to 1 in.

One of the striking peculiarities of this church is the immense crypt, which occupies the whole of the inner division, and forms virtually a second church, or rather second choir, the one under the other. It can hardly be doubted that this arose from its being a conventual church, and from the desire of having the choir of the ecclesiastics wholly separated from that to which the laity were admitted. It was, perhaps, a better mode than that of screening off a great part of the edifice, which was the method afterwards adopted. The great charm of this church is the elegance of its proportions and the beauty of its decorations, which go far to weaken the dogma that Gothic is the only style which can produce a perfect ecclesiastical interior. There is a purity and beauty of proportion about this small church which is not to be found at Rome in the greater basilicas, which no church in Ravenna had reached, and perhaps no earlier example had then attained to.

PISA CATHEDRAL.

Just half a century after San Miniato, the celebrated cathedral of Pisa was commenced, certainly one of the finest and most complete churches in this part of Italy, and the typical example of a style that arose here out of the classical during the dark ages. In spite of the admiration sometimes lavished upon this style, one cannot regret that after existing a couple of centuries it was again abandoned, without ever having extended beyond the province where it was first introduced.

In plan the cathedral shows a considerable tendency towards Gothic forms, inasmuch as the transepts extend considerably beyond the line of the nave; and we find that extension of the apse into a choir, which we first remarked in S. Apollinare Nuovo at Ravenna, carried here much further, almost to the extent of an inner church beyond the transept. Notwithstanding this modification, however, it is still a five-aisled basilica with the aisles vaulted, and a flat wooden



382. View of the Cathedral at Pisa. From Chapuy's Moyen Age Monumental.

roof covering the nave, and of considerable dimensions, the width of the nave being 106 ft., the total internal length 310, and its area about 42,000, which is under the average of mediæval cathedrals.

Its internal architecture hardly differs from that of the Roman examples, except in the introduction of bold and well-defined triforium galleries over the pier arches, which removed one of the principal difficulties of the style as practised in earlier examples, but at the expense of so much space lost for the higher description of painting; so that, though we may now praise the change, it is doubtful how far it was an improvement in the middle ages. It is easier, however, in barbarous ages, to find builders than historic painters, and the tendency to this is observed everywhere.

This church is more remarkable for its external than for its internal architecture; every part of its exterior showing an extraordinary exuberance of ornament, considering how completely that had been neglected in all previous examples. Here the balance is not only restored, but the architect has perhaps erred on the other side in making so much of a decoration which is no part of the construction, and to which no conceivable meaning can be assigned. It still remains to trace the steps by which this mode of decoration reached the completeness in which we find it here.—San Frediano of Lucca is the only older authentic example known, and that differing in no essential respect from this; but it is not difficult to see that the motive was to reproduce the effect of a Roman or Grecian peristylar temple with that multiplicity of small parts which was then in vogue. Nothing, however, in modern times, can equal the absurdity of the number of false arches and pilasters which are here used, and those who criticise severely the two orders of our St. Paul's should turn to the five orders of this façade, with their little arches and unmeaning gables. One arcade over the entrance and one following the slope of the roof are admissible, and are often used in Italy in this age with the most pleasing effect; but the piling four, one over another, as is here found, merely to hide the walls and windows, and the excessive awkwardness with which it is tried to adapt them to the slope of the roof, make up an architectural composition as clumsy as any ever attempted on the same scale, and which even the elegance of the parts and the profusion of ornament fail entirely to redeem.

The flanks of the building are better, as the arches and pilasters there are avowedly mere ornaments, and serve to divide and frame the windows, which they neither hide nor interfere with. But the most pleasing part is certainly the apse, where the three orders are well proportioned to one another, and, though this has been accomplished by cutting the upper one short, the round form and the shadow thus attained are far from unpleasing. The pilasters, however, that flank it and cover the transepts again produce the flat unmeaningness which is the great defect of the building.

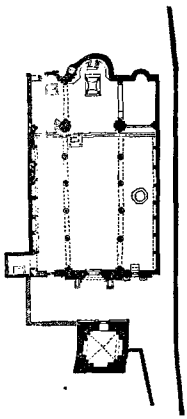
One of the best features of its details is the quantity of colour used on the exterior, as an elegant and pleasing mosaic, which has given rise to this building being most absurdly called Byzantine—the truth

being that colour in these early ages of the art was a more common external decoration than form. All the Roman basilicas were adorned —on their façades at least—with historical paintings or mosaics of figures and emblems on the flat surfaces which they now present to us. The peculiarity of the age at which we are arrived is that the architects were obliged to adopt to a great extent mere mechanical mosaic decoration in lieu of the higher class before used. Even this, however, was found afterwards to be more difficult than sculptural forms, which in consequence eventually prevailed everywhere.

A more pleasing example of this style is to be found in the church of S. Michele at Lucca. This church, being somewhat later than the cathedral of Pisa, is free from many of the faults of that building. Besides this, the faults which it possesses are less glaring, owing to its comparatively small size. It has no pilasters nor any projection less than a half or three-quarter column, and every one supports its little arch—thus giving great unity to the whole design; while the exuberance of the ornament with which every part is covered, and the general elegance of every detail, render it singularly fascinating as an architectural picture, though this repetition of columns and arches might be offensive on a larger scale. As an architectural design it must be regarded as a mere sham—a building decorated without meaning or object, and though avoiding many of the faults of the Pisan cathedral, still as one of the most false and unmeaning buildings of the middle ages.

Toscanella.

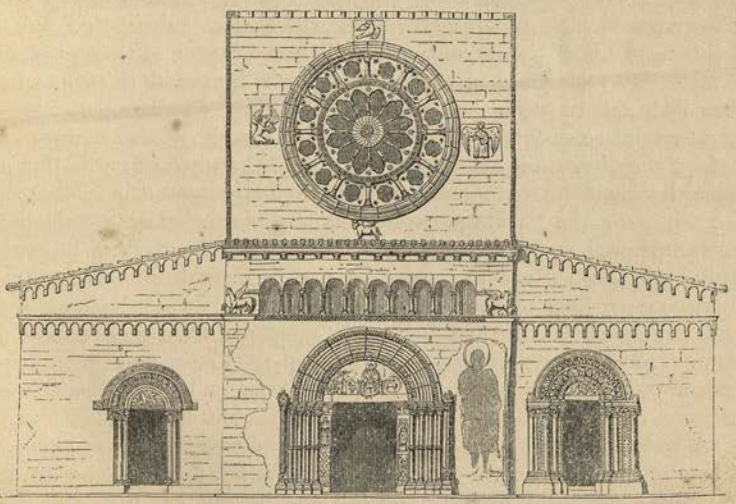
At Toscanella, near Viterbo, there are two churches, which at present constitute a group apart, though there are no doubt many other similar ones which have not yet attracted the attention of travellers. Besides the intrinsic beauty of their design and details they possess an interest as being among the latest specimens of the Romanesque style, showing what it might have reached in Rome and elsewhere had not the fatal facility of obtaining ancient columns tempted the architects to adapt these rather than work from designs of their own. The plan of one of these, the church of Sta. Maria, is given in woodcut No. 383, and a view of part of the interior in the following woodcut.



383. Plan of Sta. Maria, Toscanella. From Gailhabaud.
Scale 100 ft. to 1 in.

So little change took place in the style in the proximity of Rome, that the interior of Sta. Maria is generally ascribed to the 6th century, though it certainly belongs to the beginning of the 13th, being one of the numerous examples showing how necessary it is to take into account locality as well as style in determining the age of a building. The pillars still retain a resemblance to the Corinthian order, except that they are far thicker, being well proportioned both in the shaft and capital to

384. View of the Interior of Sta. Maria, Toscanella. From Gailhabaud.



385. Elevation of the Exterior of Sta. Maria, Toscanella. From Gailhabaud. No scale.

the load they have to bear. The arches too are wide and bold, and decorated with mouldings as essentially Gothic as could be tolerated so near to Rome, and the whole shows the Romanesque as complete and independent as it ever became. It is possible that it may never have been capable of the development of the Gothic, but there is certainly something elegant and pleasing in it as shown here. The façade (woodcut No. 385), though of about the same age as the interior, shows considerably more Gothic feeling. Perhaps it is somewhat too plain as it at present stands, but it can hardly be doubted that it originally depended in a great measure on painting for its adornment, some traces of which still remain on its walls. Its three doorways are rich and beautiful, and the single arcade over the central one pleasing and appropriate, while the great central circular window, though filled with imperfect tracery, is still a fine and bold feature in the design; and when the pediment which crowned the summit of it was preserved, the whole must have made up a composition of great merit.

The exterior of San Pietro (the cathedral) is in outline almost identical with this, but, being at least a century more modern, all that was ornamented by painting at Sta. Maria's is here repeated in relief, so that it now presents the more pleasing and richer design of the two. Its details are inferior in beauty, and it is perhaps a little open to the reproach of being overdone with ornament, but in this respect, as indeed in every other, it is infinitely to be preferred to the examples from Pisa and Lucca of which we have spoken. Every part here is appropriate, and has a distinct and positive meaning, and is as unobjectionable in taste as it is in design.

We should be justified in asserting that this form of façade must have been very common before the 16th century, from its being the one almost universally adopted by the Renaissance architects, and which Palladio and his followers have thoroughly made their own. The great Roman orders, however, which they substituted for the delicate details of this façade, are a singular instance of the perversion of taste that took place at that age, and which marred a style which then bade fair to become one of singular beauty and elegance.

It would be easy to adduce many more examples of the Romanesque style if our limits allowed it, but even then the probability is that not more than half the examples that still adorn Italy would be mentioned. For wherever the Northern barbarians on the one hand, and the Saracens on the other, did not penetrate and settle themselves, there this style, and this style only, could be practised, with an admixture of Byzantine perhaps on the east coast of Apulia; but at Naples and all round its beautiful bay, and thence to Capua, and from thence to Rome, every church must have been Romanesque. These may now be disfigured with whitewash and repairs, but many beautiful specimens still no doubt remain to reward the intelligent investigator; and a work written expressly upon this style would restore to science one of the most interesting, if not the most beautiful, forms of the art, and one which, notwithstanding some glaring defects, has not, I feel con-

vinced, been yet fairly judged or appreciated. It never had a fair chance in Rome, owing to the richness of that city in old materials. Ravenna sunk into insignificance before she had time to work it out. Florence and Pisa fell beneath barbarian influence long before they had fairly settled down to the task; and such isolated examples as those of Torcello, Toscanella, &c. show rather what the direction of the style was than illustrate what might have been attained by any great and continuous effort to render it complete. Still even in Rome itself the basilicas possess beauties that it is not easy to rival. Their great naves, 80 ft. in width, lined on each side by noble ranges of pillars opening to side aisles, either with a second colonnade or a wall covered with frescoes, and leading direct to the noble semicircular apse covered with mosaics, presented an *ensemble* more purpose-like and complete than any Gothic cathedral ever displayed. It is true a vaulted roof was impossible with such spacious dimensions: but is a stone roof really an indispensable requisite for internal beauty? May not wood and metal, properly used, be allowed sometimes to supply its place? No one will deny the beauty of the Gothic vault; but when we consider the *tours-de force* required to suspend it in the air, and how much, both internally and externally, was sacrificed to obtain it, we may perhaps be permitted to ask if it really is an unmixed triumph. But whether so or not, all Gothic cathedrals fail in having the principal point of grandeur half-way down the church at the intersection with the transepts, beyond which the interest again declines to the east end. Sta. Maria del Fiore at Florence avoids this bathos, and the first design of St. Peter's caught the idea, though it was somewhat spoiled in the execution. Our St. Paul's has the egregious defect of a vestibule 110 ft. in diameter leading to a little choir less than 40 ft., and so with most cathedrals; but nowhere was this avoided by such simple means and so effectually as in the basilicas. The long colonnade gave length and perspective effect. The transept gave dignity, and if a flood of light was admitted at each end of it, it must also have given great splendour to the apse and its altar—to the objects in fact for which the church was built, and to which every other part of the architectural design was and ought to be subordinate. It would have been better, no doubt, if a great dome had covered the square in front of the apse where the altar stood. It was this that the Byzantine architects aimed at and accomplished, and it was the one happy inspiration of the Renaissance architects. It would have, however, required more constructive skill than the architects of Rome possessed in the age of Constantine or of his successors. By attention to these principles it would be practicable now to build a better basilica than has yet been built; but still the old examples possess beauties well worthy of the most careful study of those who would find out where the secret of architectural beauty has been so long hidden from modern eyes.

CHAPTER IV.

CIRCULAR CHURCHES.

CONTENTS.

Circular Churches — Tomb of Sta. Costanza — Churches at Perugia, Nocera, Ravenna, Milan.

Although the early Christian architects used the circular form of building, which they derived from the Romans, almost as frequently as the rectangular, still they never attempted it on the same scale, nor made it so essentially their architectural form as the basilican became, and it was left for the Byzantine architects of the age of Justinian to carry this form to the greatest degree of perfection which it ever reached, at any rate previous to the time of the Renaissance. Notwithstanding this, there are still some very remarkable and beautiful Romanesque circular buildings, and which contain at least the germ of all that was afterwards done in this direction.

In speaking of them it is necessary to bear in mind what I have before pointed out, that the basilica was the place of assembly of the infant Christian republic—the ecclesia of the faithful. The circular building, properly called the church or kirk,[1] was the sacramental temple—not a place of assembly, but the place for the initiation into the sacred mysteries, or for the performance of the more sacred rites of the Church.

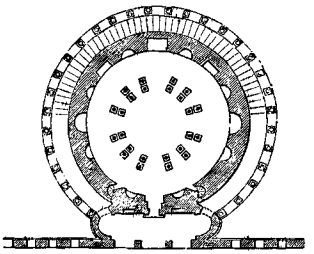
It has been already pointed out how all those nations who derived their tombs from the Tartar, not from the Egyptian, type adopted the circular form wherever such was practicable, and how more especially this was done by the Etruscans, and from them adopted by the Romans, from whom again the early Christians took it almost universally; and if not all, certainly the greater part of the earliest circular Christian buildings were tombs, or meant originally to be such, though this was afterwards modified to a very considerable extent.

We have certainly three circular buildings of the age of Constantine, differing from one another, and containing in themselves the types of all subsequent modifications. The earliest of them probably is the sepulchre of his mother Helena, who died A.D. 328. This tomb has been already described, and an elevation and section of it given.[2]

[1] I believe the word kirk, common to all Teutonic languages, to be derived from the word circulus or cirque, Teutonic kirk.

[2] See p. 344, woodcut No. 282.

The two tombs that stood in the spina of the circus of Nero, where St. Peter suffered martyrdom, were, as shown in the plan (woodcut No. 368), identical with this one, both in form and dimensions, and I feel convinced owed their erection to the same prince who raised this memorial to the memory of his mother.



336. Plan of the Tomb of Sta. Costanza, Rome. From Isabelle, Edifices Circulaires. Scale 100 ft. to 1 in.

The next monument was that which he raised as a tomb for his daughter Constantia, now known as the baptistery of Sta. Agnese, and probably used as such from its foundation. It differs from all previous tumular arrangements, inasmuch as the interior, though only 73 ft. in diameter, is adorned by a double range of columns supporting arches, on which rises the drum or circular part supporting the dome, which is pierced with a clerestory of 12 windows; the lower part is surrounded by a circular vaulted aisle, covered even at the present day with its original fresco paintings, which are still so Roman in their character as to have induced the belief, long maintained, that this building was a heathen temple. Its form, however, and the sarcophagus of the princess, found in one of the twelve niches that surround the aisle, more than suffice to prove this opinion erroneous, and to assign to the building its true character.

In front of this building was an oblong space with circular ends, and surrounded on all sides by arcades; its dimensions were 535 ft. by 130, and though so ruined as hardly to allow of its arrangements being now restored, it is interesting, as being perhaps the only instance of the "*forum*," which it is probable was left before all tombs in those times, and traces of which may perhaps be found elsewhere, though as yet they have not been looked for.

The third building of this age is the Lateran baptistery, generally called the tomb of Constantine, and sometimes said to have been a tomb built by him. It is very inferior to the other two in every respect. In plan it is an octagon, only 65 ft. in diameter, in the centre of which stand eight pillars, connected the one with the other by a very attenuated entablature; on their heads stand eight smaller pillars, which support the roof.[1] As no part of this is vaulted, the walls and pillars are thin and lean compared with other examples; and, indeed, the whole bears the stamp of this decadence more distinctly than any other building of its age. It has, however, been so much altered in modern times, that it is difficult to speak with certainty of it; and it may have had redeeming features, which we cannot now discern.

The only other important circular building within the walls of

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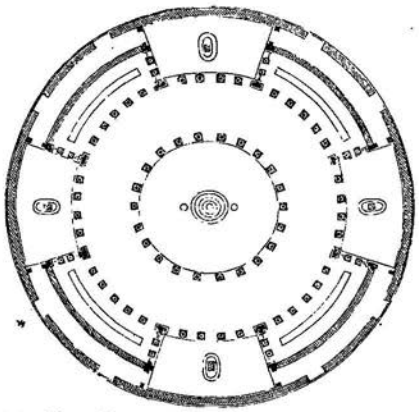
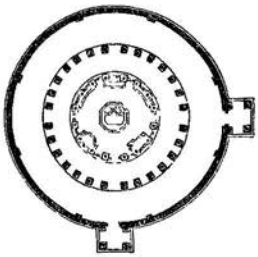
[1] The architecture of this building would be extremely similar to that of Diocletian's Temple of Jupiter at Spalatro (p. 313) if the pillars there were removed a little way from the wall instead of being attached to it.

Rome of this early age is that known as S. Stephano Rotondo. Though there is nothing to fix its date with any precision, it is almost certain that it belongs to the 5th and 6th centuries of the Christian era. It is 210 ft. in diameter, and its roof was supported by two ranges of columns, circularly disposed in its interior; the first or inner range supporting a horizontal architrave like that of St. Peter. In the outer one the pillars support arches like those of St. Paul's. All the pillars are taken from older buildings. The outer aisle was divided into eight compartments; but in what manner, and for what purpose, it is not now easy to ascertain, owing to the very ruined state of the building. Nor can it be determined exactly how it was roofed; though it is probable that its arrangements were identical with those of the great five-aisled basilicas, which it closely resembles, except in its circular shape.

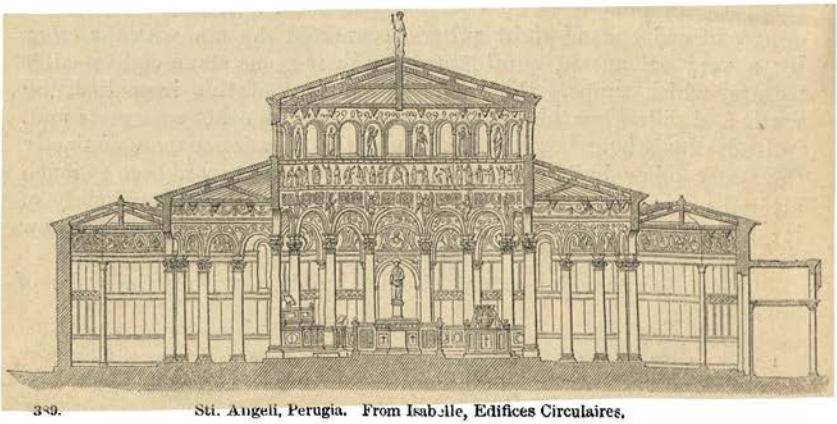


387. Plan of San Stephano Rotondo. From Gutensohn and Knapp. Scale 100 ft. to 1 in.



838. Sti. Angeli, Perugia. From Isabelle. Scale 100 ft. to 1 in.

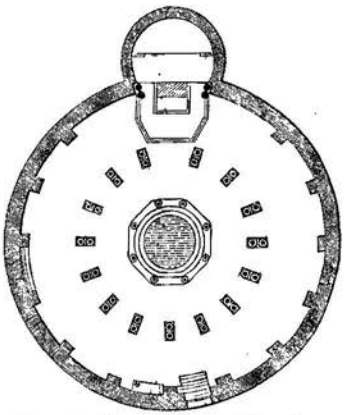
This is more clear in another church of the same age, that of Sti. Angeli, at Perugia, which is very similar in disposition. Of this building a section is here shown, as given by M. Isabelle—perhaps not quite to be depended upon in every respect, but still a very fair representation of what the arrangements of the circular wooden-roofed churches were. Its dimensions are less than those of



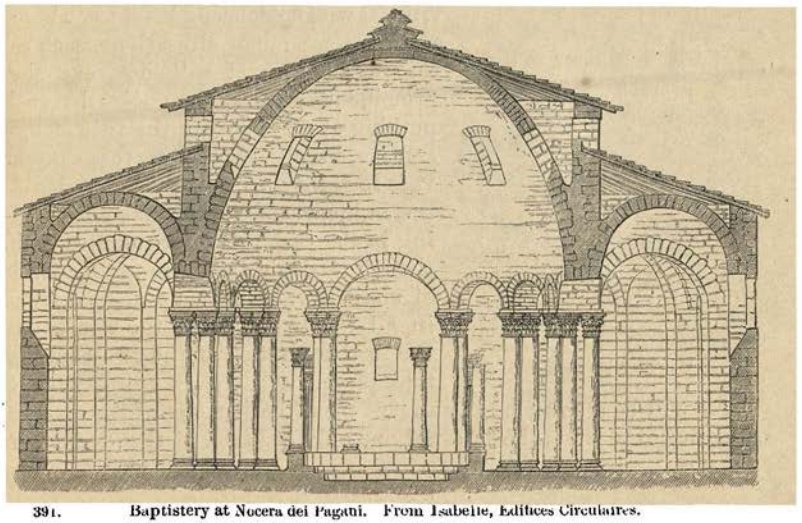
389. Sti. Angeli, Perugia. From Isabelle, Edifices Circulaires.

San Stephano, being only 115 ft. in diameter; but it is more regular, the greater part of its materials being apparently original, and made for the place they occupy. In the church of San Stephano, the tomb-shaped circular form was probably used as symbolical of his martyrdom. That at Perugia was probably originally a baptistery, or may have been dedicated also to some martyr; but in the heart of Etruria this form may have been adopted for other reasons, the force of which we are hardly able at present to appreciate, though in all cases locality is one of the strongest influencing powers as far as architectural forms are concerned.

At Nocera dei Pagani, on the road between Rome and Naples, there is an extremely beautiful circular church, built undoubtedly for the purpose of a baptistery, and very similar to the tomb of Constantia, known as St. Agnese, in plan and general arrangement. It is somewhat larger, being 80 ft. in diameter. Its principal merit is the form of its dome, which is singularly graceful internally. On the exterior it shows a peculiarity which it is well worth while noting, as this is perhaps the earliest instance known of a practice that afterwards became universal, and, indeed, the prime motive of the Gothic styles—I allude to the practice of covering the vaults of buildings with wooden roofs. Notwithstanding its being so general, and our familiarity with it being so great, that we



390. Baptistery at Nocera dei Pagani. Scale 50 ft. to 1 in.



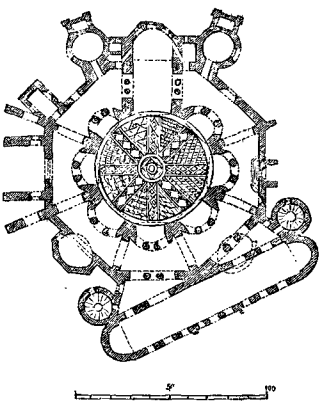
391. Baptistery at Nocera dei Pagani. From Isabelle, Edifices Circulaires.

have learned to think it no blemish, there cannot be a practice more destructive of true architectural effect, and what is worse, of true building stability. All vaults after this age became mere false ceilings, unseen externally, and depending for their existence on the maintenance of a very frail wooden covering. It may have been difficult to make naked vaults and domes proof against the weather. Still it was done before, and is done by the Saracenic architects to the present day; but the Gothic architects could not or would not do it. We here find within a century of the time of Constantine the opposite practice commenced, and except in the rarest possible instances, we must look for no more true roofs in Europe even to the present day.

Ravenna.

Ravenna possesses several circular buildings, almost as interesting as those of the capital; the first being the baptistery of St. John, belonging to the original basilica, and consequently one of the oldest Christian buildings of the place. Externally it is a plain octagonal building, 40 ft. in diameter. Internally it still retains its original decorations, which are singularly elegant and pleasing. Its design is somewhat like that of the temple at Spalatro, but with arcades substituted everywhere for horizontal architraves; the century that elapsed between these two epochs having sufficed to complete the transition between the two styles.

Far more interesting than this is the great church of St. Vitale, the most complicated, and at the same time, perhaps, the most beautiful of the circular churches of that age. In design it is nearly identical with the Minerva Medica at Rome,[1] except that this is an octagon instead of a decagon, and that it is wholly enclosed by an octagonal wall, whereas the Roman example has besides two curvilinear wings, enclosing its sides. There are also some minor alterations, such as the introduction of galleries, and the prominence given to the choir; but still nothing at all to justify the title of Byzantine, usually applied to this church. It is in reality a bad copy from a building in Rome, and very unlike any building in the East we are acquainted with, though no doubt there are certain forms of similarity, as indeed must be found in all the buildings of the age before the final separation of the two churches took place.

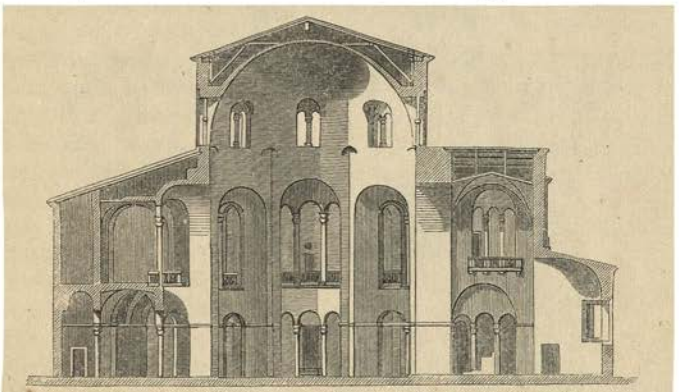


392. Plan of St. Vitale, Ravenna. From Isabelle.

As will be seen from the annexed plan, the diameter of the external octagon is 110 ft., of the internal one only 50, so that the dome here

[1] See p. 345.

is a third less than that of its prototype, and so completely had the architects degenerated from the dome-builders of Rome, that instead of the scientific construction of the Minerva Medica, this is wholly composed of earthen pots, and protected by a wooden roof. It is true these pots have been used in the East for domes and roofs from the earliest ages, and form as stable and as permanent a mode of covering as stone itself, and might easily be so used as to surpass the heavier material for this purpose. But such is not the case here; and though it is hard to blame what has stood the wear and tear of thirteen centuries, and seen the fall of so many of its younger and more aspiring rivals, still the construction of this dome serves to show how excellent the expedient is, rather than how it should best be applied.



393. Section of St. Vitale, Ravenna. From Isabelle. Scale 50 ft. to 1 in.

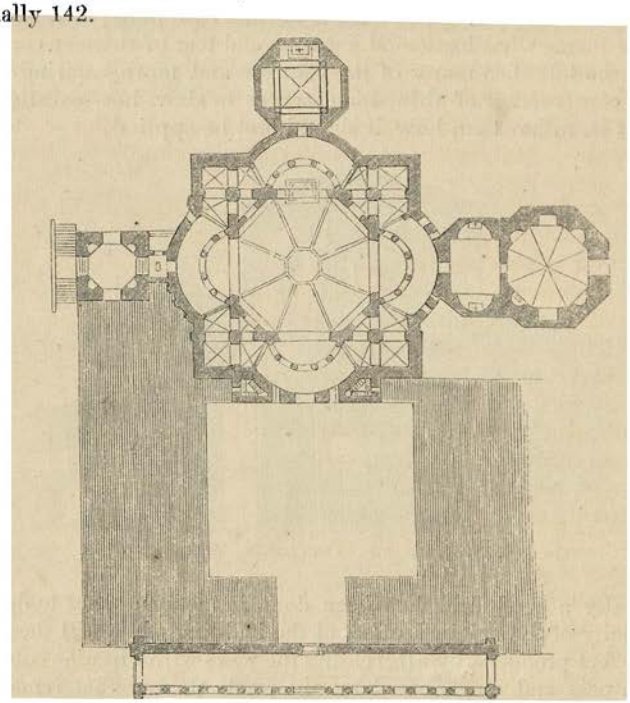
Internally a good deal has been done in modern times to destroy the simplicity of the original effect of the building; but still there is a pleasing effect produced by alternating the piers with circular columns, and a lightness and elegance about the whole design that renders it unrivalled in the Western world among churches of its class. It seems to have been admired by its contemporaries as much as in modern times. Charlemagne at least, we know, copied it for his own tomb at Aix-la-Chapelle, and many other circular buildings of that age seem to have derived their inspiration from this one.

The church of San Lorenzo at Milan, had it not been so much altered in modern times, would take precedence of San Vitale in almost every respect. The date of its erection is not known, though it certainly must be as early, if not earlier than the time of Justinian. Down to the 8th century it was the cathedral of the city. It was burnt to the ground in 1071, and restored in 1119; the dome then erected fell in 1571, on which it underwent its last transformation from the hands of Martino Bassi and Pellegrini, who so disfigured its ancient details as to leave considerable doubt as to its antiquity.

Its plan, however, seems to have remained unchanged, and shows a further progress to what afterwards became the Byzantine style than is to be found either in the Minerva Medica or in San Vitale. It is

in fact the earliest attempt to bring the circular church to a square shape; and except that the four lateral colonnades are flat segments of circles, and that there is a little clumsiness in the angles, it is one of the most successful we know of in that early age.

The dome as it now stands is octagonal, which the first dome certainly could not have been. Its diameter is 70 ft., nearly equal to that of the Minerva Medica, and the whole diameter of the building internally 142.



394. Plan of S. Lorenzo at Milan. From Quast, Alt Christlichen, &c. Scale 100 ft. to 1 in.

In front of the church, in the street, is a handsome colonnade of pillars, borrowed from some ancient temple—it is said from one dedicated to Hercules. This leads to a square atrium, now wholly deprived of its lateral arcades; and this again to a façade, strangely altered in modern times. Opposite this, to the eastward of the church, is an octagonal building, apparently intended as a tomb-house; and on the north side a similar one, though smaller.

On the south is the baptistery, about 45 ft. in diameter, and approached by a vestibule in the same manner as that of Constantine at Rome, and the tomb of his daughter Constantia: all these, however, have been so painfully altered, that little remains besides the bare plan of the building; still there is enough to show that this is one of the oldest and of the most interesting Christian churches of Italy.

The building now known as the Baptistery at Florence is an octagon, 108 ft. in diameter externally. Like the last-mentioned

church, it originally was the cathedral of the city, and was erected for that purpose apparently in the time of Theodelinda, queen of the Lombards. If this was so, it certainly had not originally its present form. Most probably those columns which now stand ranged round the walls, at that time stood in the centre, as in the Roman examples. If the original roof was of wood, it was probably in two stories, like that of the baptistery of Constantine, or it may have been a dome of more solid materials like that of the Sta. Costanza.

At the same time when the new cathedral was built, the older edifice seems to have been remodelled both internally and externally by Arnolpho da Lapo, and both its form and decoration so completely changed, that it must be considered rather as a building of the 13th century than of the 6th, in which it seems originally to have been erected.[1]

There can be little doubt that many other similar buildings belonging to this age still exist in various parts of Italy; for it is more than probable that almost all the earlier churches were circular, when at least the city was not of sufficient importance, or the congregation so numerous as to require the more extended accommodation of the basilica. They either, however, have perished from lapse of time, or been so altered as to be nearly unrecognisable; and we must again leap forward over the intervening centuries to the Pisan style, to find the Romanesque as complete a style as the Gothic, and possessing beauties and qualities of its own.

The most perfect as well as the most celebrated example of this style is the Baptistery of Pisa, commenced from the designs of Dioti Salvi,[2] about a century after the cathedral, and showing that richness and completeness which we admire in San Michele at Lucca; avoiding, like that church, the defects which were pointed out in speaking of the cathedral, but still retaining the inherent faults of the style, inasmuch as the architecture is mere ornament, being neither an arcade for shelter, nor a buttress for constructive use. It is also difficult now to ascertain what the original design really was, as the works were continued down to the end of the 14th century, and a great deal of the then fashionable Gothic ornament was added to the Romanesque forms of the original, and so engrafted on and mixed up with them as to make it difficult to distinguish what is mere addition which has replaced the earlier forms.

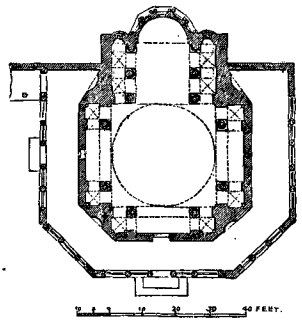
Internally the building is exactly 100 ft. in diameter. The central part, 59 ft. wide, is a circular colonnade, with four polygonal piers and pairs of pillars between them. This supports a lofty cone, internally 175 ft. in height, the lower part of which is now covered externally with a dome, which from its ornaments is evidently of the 14th century, and certainly not a part of the original design, which, like most

[1] In this building they now show a sarcophagus of ancient date, said to be that of Galla Placidia, daughter of Theodosius. She, however, was certainly buried at Ravenna; but it may be of her time, and in these ages it is impossible to distinguish between baptisteries and tombs.

[2] One portion of the building is shown (woodcut No. 382).

Italian domes of this age, was probably intended to have consisted of successive circular stories, each less in diameter than that below it, the whole terminating in a lofty cone. That such would have been a more appropriate and beautiful feature than the present ungraceful central tower cannot be doubted; and if it existed, it would really render this one of the most beautiful buildings of its age and style. Even as it is, the beauty of its details and the exuberance of its ornaments render it externally a most captivating design, though internally it possesses neither elegance of form nor beauty of any sort.

A more graceful design than this, though insignificant in size and richness, is the little church of Sta. Fosca in the island of Torcello, whose basilica we have already spoken of. The whole building is only 75 ft. across; the dome—unfortunately a wooden one—little more than 30 ft. in diameter. But the mode in which it is placed on its eight pillars, and the variety of perspective given by the breaks in the wall, the dignity of the choir and the general arrangement are above all praise. Externally, too, the arcade is a real one, not merely *appliqué*, as in the Pisan examples, and affords both shadow and relief to the exterior—as gracefully at least, if not more so, than the circular colonnades of the Roman temples, from which the idea is evidently borrowed.



395. Plan of Sta. Fosca, Torcello. From Agincourt.

The details of these pillars also, and their arches, are singularly graceful, and make up a whole as remarkable for its elegance as it unfortunately is for its singularity. It is evidently nearly the last of its race; for after this period, except in an occasional baptistery here and there, all reminiscence of the circular or polygonal forms seems to have been abandoned for the rectangular arrangement of the basilicas, which thenceforward were almost universally adopted.[1]

[1] In this and the following chapters the expression "East End" is generally used as if synonymous with altar end. On this side of the Alps such an expression would be always correct. It is so in nine cases out of ten in such German cities as Milan or Verona, but is correct only by accident in such as Pisa, Ferrara, Bologna, or any of the cities of the South, where the Gothic races did not entirely supersede the original population; but as without very large detailed plans of the towns it is impossible to ascertain this, the expression has been allowed to stand.

The orientation of churches, by turning their altars towards the east, is wholly a peculiarity of the Northern or Gothic races; the Italians never knew or practised it.

CHAPTER V.

ROMANESQUE ARCHITECTURE.

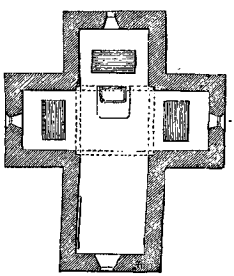
CONTENTS.

Tombs — Towers — Secular buildings — Romanesque Architecture in the East.

TOMBS.

IT has already been remarked that it is difficult to distinguish in all cases between baptisteries and tombs; but there are at all events two of the latter class of edifices at Ravenna regarding which there can be no doubt.

The earliest—that of Galla Placidia—now known as the church of SS. Nazario and Celso, must have been erected before the year 450. It is singular among all the tombs of that age from its wholly abandoning the circular for a cruciform plan. Such forms, it is true, are common in the chambers of tumuli and also among the catacombs, and the church which Constantine built in Constantinople and dedicated to the Apostles, meaning it however as a sepulchral church, was something also on this plan. Notwithstanding, however, these examples, this must be considered as an exceptional form, though its smallness (it being only 35 ft. by 30 internally) might perhaps account for any caprice. Its great interest to us consists in its retaining not only its original architectural form, but also its polychromatic decorations in a state of almost their original completeness.[1] The three arms of the cross forming the receptacles for the three sarcophagi is certainly a pleasing arrangement, but only practicable on so small a scale. Were it larger, it would lose all appropriateness as well as all effect.



396. Tomb of Galla Placidia, Ravenna. From Quast. No scale.

Far more interesting than this—architecturally at least—is the tomb of Theodoric, the Gothic king, now known as Santa Maria Rotunda. The lower story is a decagon externally, enclosing a cruciform crypt. It is 45 ft. in diameter, each face being ornamented by a deep niche. These support a flat terrace, on which originally stood a range of small pillars supporting arches which surrounded the upper

[1] These are well illustrated in Quast, Alt Christlichen Bauwerke zu Ravenna.

story. These have all been removed, and no trace of them remains except on the face of the tomb itself, where the sinkings of their architraves and vaults are still distinctly shown. The most singular part of the building is the roof, which is formed of one great slab hollowed out into the form of a flat dome—internally 30 ft. and externally 35 ft. in diameter—and forms certainly one of the most singular and appropriate coverings for a tomb perhaps anywhere to be found. Near the edge are a range of false dormer windows, which evidently were originally used as handles by means of which the immense mass was raised to its present position. In the centre of the dome is a small square pedestal, on which, it is said, once stood the urn which contained the ashes of its founder.

397. Plan of Tomb of Theodoric. Scale 50 ft. to 1 in.

398. Elevation of Tomb of Theodoric, Ravenna. From Isabelle, Edifices Circulaires.

The model of this building seems almost certainly to have been the mole of Hadrian, which Theodoric saw, and must have admired, during his celebrated visit to Rome. The polygonal arrangements of the exterior, and the substitution of arcades for horizontal architraves, were only such changes as the lapse of time had rendered indispensable. Whether we consider the appropriateness of the forms, the solidity of its construction, or the simplicity of its ornaments and details, this tomb at Ravenna is not surpassed by any building of its class and age. It deserves attention, besides, from being apparently the first building to which the style of external decoration was applied which we have just been examining in its greatest development at Pisa.

Towers.

There is perhaps no question of early Christian archæology involved in so much obscurity as that of the introduction and early use of towers. The great monumental pillars of the Romans, such for instance as those of Trajan or Antoninus, were practically towers, and latterly their tombs began to assume an aspiring character like that at St. Remi (woodcut No. 286), or those at Palmyra and elsewhere in the East, which show a marked tendency in this direction. But none of these can be looked upon as an undoubted prototype of the towers attached to the churches of the Christians.

At Ravenna, as early as the age of Justinian, we find circular towers attached to St. Apollinare ad Classem (woodcut No. 376),

and in the other churches of that place they seem to have been considered as no less necessary adjuncts than they were in after ages. At the same time, it is by no means clear that they were erected as bell-towers; indeed the evidence is tolerably clear that bells were not used in Christian churches till the time of Pope Adrian I., some two centuries later. What, then, were they? There is, I think, no trace of their being sepulchral monuments, or that they were designed or used as tombs; and unless they were, like the *sthamlas* of the Buddhists,[1] pillars of victory, or towers erected to mark sacred or remarkable spots, it is difficult to say what they were, or where we are to look for an analogy.

Be this as it may, the oldest towers of the circular form that we are acquainted with are those of Ravenna, unless indeed some of the Irish towers are earlier; and the last of the series of circular Romanesque towers is the famous leaning one at Pisa, commenced in the year 1174. The gradations between these two extremes must have been the same that marked the changes in the architecture of the churches to which they are attached; but the links that connect the two are more completely wanting in the case of the towers than in that of the churches.

The tower of St. Apollinare ad Classem, above referred to, the most perfect of those at Ravenna, is a simple brick tower (see woodcut No. 376), 9 stories in height, the lower windows being narrow single openings; above there are two, and the three upper stories adorned with four windows of three lights each.

The celebrated Pisan tower (woodcut No. 382) possesses all the peculiarities of the style to which it belongs—the lower story, 35 ft. in height, having an arcade of three-quarter columns, above which are six stories of arcades averaging something less than 20 ft. each. It was apparently after the building of the third of these that the settlement took place to which the tower owes its principal celebrity, as it is attempted to be set right in the fourth. This part of the tower is 52 ft. in diameter; but the eighth story, which was not added till the middle of the 14th century, is hardly 40 ft. across. Whether this was therefore the original design or not, we do not now know; or whether it was adopted in consequence of the settlement of the tower requiring a lighter superstructure and less altitude than was at first intended: but whether it is so or not, it forms a graceful variety to the monotony of the six stories of arcades. Notwithstanding these defects in the design, and its unstable position, it is one of the most pleasing as well as one of the richest of the Italian campaniles of its age.

In Rome, in so far as we now know, the first tower attached to a church was that built by Pope Adrian I., in front of the atrium of St. Peter's; but they soon became common, and we now find them belonging to the churches of S. Lorenzo without the walls, S. Croce in Gerusalemme, S. Giovanni, S. Paulo, S. Clementino, S. Giorgio in Velabro, and others. All these are square in plan and extremely similar in design, no improvement and scarcely any change having

[1] See p. 6.

taken place between the first and the last, as if it were an old and established form when first adopted. That attached to Sta. Maria in Cosmedin is perhaps one of the best and most complete. Its dimensions are small, its breadth being little more than 15 ft., its height only 110; but notwithstanding this there is a certain dignity of design in the whole, and, in a city where buildings are not generally tall, a sufficiency of height to give prominence without overpowering other objects, which renders these Roman towers not only beautiful structures in themselves, but singularly appropriate ornaments to the buildings to which they are attached.

399. Tower of Sta. Maria in Cosmedin.
From Gutensohn and Knapp.

The chief interest of these towers is derived from the numerous progeny to which they gave birth: for though there is scarcely a single instance of a square Romanesque tower beyond the walls of Rome during the period in which this style flourished, the form was seized upon with avidity by the Gothic architects in all the countries of Europe; and whether as a detached campanile, as used in Italy, or as an integral part of the building, as we shall soon find it used on this side of the Alps, it forms the most prominent, perhaps also the most beautiful, feature in the aspiring architecture of the Middle Ages.

400. Porta Palatina, Turin.
From Osten's Bauwerke in der Lombardei.

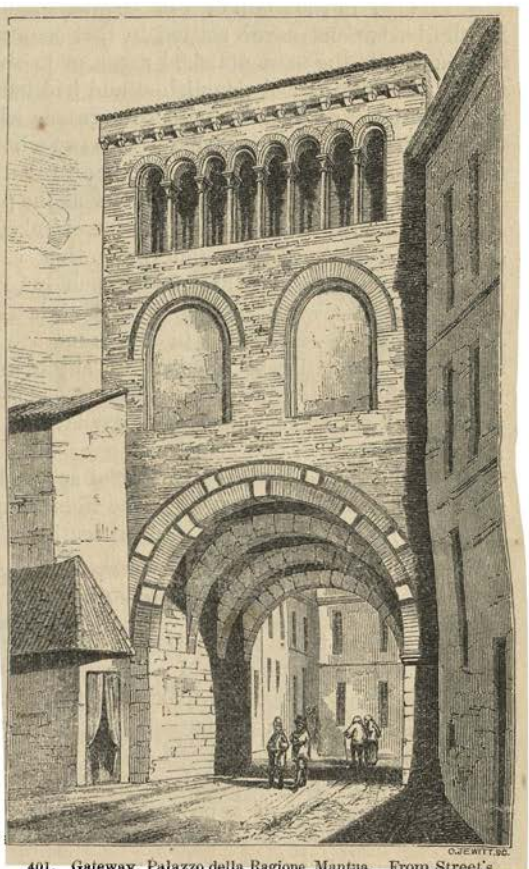
Secular Buildings.

Very few remains of secular buildings in the Romanesque style are now to be found in Italy. The palace of Theodoric at Ravenna, though sadly mutilated, is perhaps the best and most perfect. In all its details it shows a close resemblance to that of Diocletian at Spalatro, more especially to the Porta Aurea and the most richly and least classically decorated parts of that edifice, mixed at the same time with mouldings and details belonging properly to the Gothic styles, which were then on the eve of being introduced into general use.

Another building, perhaps slightly more modern, is the Porta

Palatina at Turin, which still retains the architectural ordinance of the exterior of a Roman amphitheatre, but so modified by Gothic feeling that the pilasters are even more useless and unmeaning than in its classical prototypes. The style is evidently beginning to feel its own strength, and learning to dispense with the traditional forms that had so long governed it. This building, which cannot be dated more precisely than by saying that it belongs to the age between Justinian and Charlemagne, is probably the last expiring effort of Romanesque architecture in a Gothic country, though the paucity of contemporary examples renders it extremely difficult to trace the exact history of the style at this age.

Another example—the Palazzo della Ragione at Mantua—shows the style as it existed in the 12th century, when it had wholly emancipated itself from the classic principles of design, though still retaining reminiscences of classic forms in all its details. It illustrates also the great principle of Lombard design in tall buildings, which they always sought to ornament by increasing the number of openings in each story, and decreasing in consequence their size, but making them at the same time more ornamental.



401. Gateway, Palazzo della Ragione, Mantua. From Street's 'Brick and Marble in the Middle Ages.'

If more attention were paid to the subject, it is probable that many fragments of civil and domestic architecture might be found, sufficient to illustrate the progress of the art in this age; but civil buildings are so generally altered to suit the varying wants of the community, that probably no complete building now remains; and after all, the examples must always have been so inferior to the ecclesiastical specimens as to be far less important in any history of art.

Were it possible without repetition and needless complexity to treat the subject in a perfectly consecutive manner, it is here that the chapter on the Romanesque styles of France and Spain ought to follow. For the latter, however, I fear we have absolutely no materials as yet; and though France is rich in fragments, no edifices remain sufficiently unchanged in form and feature to enable us to speak of their architectural beauties of design. Nor could we from these restore the style, if we had lost all trace of it in other countries. It will therefore be found more convenient, though perhaps not so philosophical, to treat the French Romanesque as an incipient Round Gothic style, if the expression may be used, and by treating the whole consecutively, to trace the gradual change of the one into the other. This change in the south of France was singularly easy and gradual, for the barbarians never settled in that country in sufficient numbers to overwhelm the more polished races, or to obliterate that civilisation which the Romans had established and had left there. So that till the time of Simon de Montfort and the crusade which placed him on the throne of Languedoc, it is difficult to say whether the Romanesque or the Gothic style had the predominance in that country.

At the same time, such specimens as the porch of the cathedral at Avignon, the baptistery at Aix, and the circular church at Riez, the two churches at Vaison, and numerous other examples which will be alluded to in the sequel, are all of such pure and undoubted Romanesque, that in a work treating of that style alone, they could not possibly be passed over. Still in the next age many examples are so similar to them that it requires no slight knowledge to distinguish between the one and the other. The Romanesque here passes into the mediæval form by such insensible gradations, that it is nowhere possible to draw a line between them.

To all this we shall return hereafter; and in the mean *time* say what little can be said regarding the Romanesque style in the Eastern empire, which concludes the present section of the work.

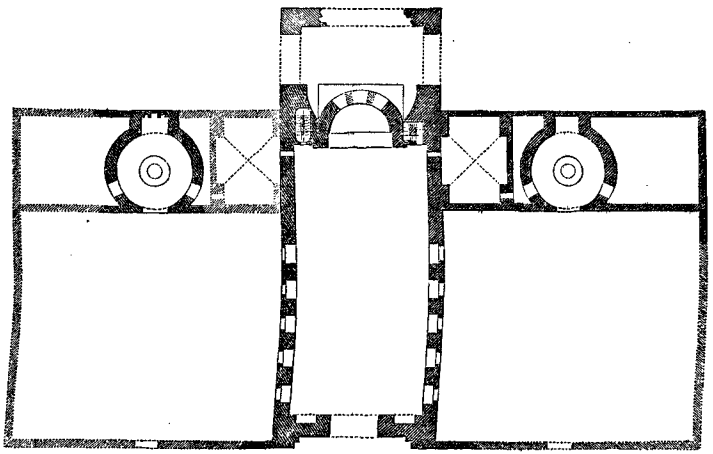
Romanesque Architecture in the East.

The almost total destruction of the two great imperial cities of the Levant—Antioch and Alexandria—has left a gap in the architectural history of the Christian Church which will never probably be supplied. In the latter city especially the community of the Christians seems to have been important as early as the time of Hadrian, and in the age of Athanasius they possessed a hierarchy and all the organisation of a powerful society. Could we now restore their churches, they would leave little to be desired in this branch of our subject: unfortunately, not one stone remains on another of all the proud structures of that queen of the East. We are also singularly deficient of even the usual rhetorical descriptions of the early Christian writers, from which we might guess at the forms and dimensions of the buildings that adorned the city. From such fragments as still exist in the Thebaïd and other parts of Upper Egypt,

there can be little doubt but that they were, like those of Rome, either basilicas or circular churches, adorned internally with columns taken from earlier buildings, but at Alexandria almost universally supporting pointed arches instead of horizontal architraves. The Christian edifices in the Thebaïd at least *all* possess this peculiarity, and its almost universal adoption by the Moslems in the first century of the Hejra[1] points to its general, if not universal, use in the countries which they first conquered.

At Antioch[2] we have only a description of an octagonal church erected by Constantine, on which Eusebius lavishes a few of the flowers of his bombastical eloquence, from which it is so difficult to glean a few grains of common sense. He is, however, more intelligible in speaking of the basilica at Tyre,[3] built by Paulinus the bishop in the first years of the 4th century. In every respect it seems to have resembled a 3-aisled Roman basilica, with a spacious atrium, adorned by its fountain and galleries over the side aisles.

The church at Pergamus is almost the only one of this age that has been examined with anything like the care or attention neces-



402. Church at Pergamus. From a plan by Ed. Falkener, Esq. Scale 100 ft. to 1 in.

sary to understand its peculiarities. It is so like a Pagan building in many respects, that it has frequently been taken for one, though all admit that it was subsequently used for Christian purposes.

As will be seen from the woodcut No. 402, it is a simple basilica-formed building twice the length of its breadth, ending in a simple apse pointing towards Jerusalem. It originally had galleries on both

[1] For further particulars the reader is referred to a paper read by the Author to the Royal Institute of British Architects on the 18th of June, 1849, and to another on the same subject by Sir Gardner Wilkinson, read on the 16th of July of the same year. The latter paper confirms the Author's views of the matter to the fullest extent. Both papers were reported in the usual literary periodicals of the day.

[2] Vita Constantini, iii. 50.

[3] Eusebius, Alexand. Hist., x. 14.

sides, and the places where the beams were inserted are still seen on the walls, though it is not clear how they were supported in front. It may have been by marble columns, which would have been easily removed, or possibly they were of wood, and have decayed. On each side of the apse are something like transepts, but opening only by doors to the church, and beyond these two circular domical buildings with square apses. These may have been either sacristies, or baptisteries, or tombs; there is nothing now left to mark their destination; but in the early ages of the church the complete ecclesiastical establishment always consisted of a rectangular building grouped with one or two of circular form. St. Peter's had two placed on one side; St. Sophia has two situated at the alternate angles; and already several instances have been quoted of such a juxtaposition, and many more will appear in the sequel: but the typical example was that at Jerusalem, which consisted of one great circular building placed somewhat unsymmetrically to the southward and eastward of the basilica, and being the most sacred and important church in the East of its age, it fixed the fashion indelibly on all future churches of its class.

This church at Pergamus is built of brick, and was faced with stone, but the greater part of this coating, with almost all the architectural mouldings, have been removed, so that it is difficult to fix its age with anything like certainty; there can, however, be little doubt but that it belongs to the age of Constantine. It may be as likely a little before as a little after his exact period.

There is another church of the 4th century known to exist at Nisibin.[1] It is a triple church, the central compartment being the tomb of the founder, the first Armenian bishop of the place. Though much ruined, it still retains the mouldings of its doorways and windows as perfect as when erected, the whole being of fine hard stone. These are identical in style with the buildings of Diocletian at Spalatro, and those of Constantine at Jerusalem; and as their date is well known, they will, when published, form a valuable contribution to the scanty information we now possess regarding the architecture of this period.

There is every probability that many more fragments of Christian churches of this early age still remain in Asia Minor and Syria, and when examined will enable us to reconstruct the lost chapter in the history of art; but till this is done, we must rest content with two well-authenticated buildings of the age of Constantine, which still exist at Jerusalem and Bethlehem.

Churches at Bethlehem and Jerusalem.

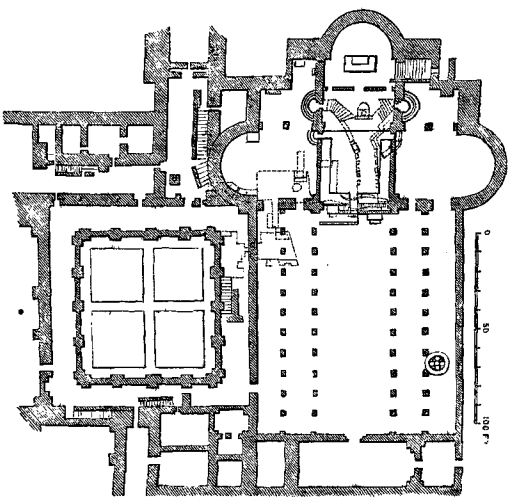
Although the church at Bethlehem has been frequently sketched in recent times, no plans nor any details have been published that can

[1] Drawings of this building have been recently brought home by M. Boutcher, the artist employed by the Assyrian Excavation Fund, and will no doubt be one day published.

at all be depended upon since the time of Bernardino Amici,[1] in the very beginning of the 16th century, from whom the annexed plan is taken.

The basilica is of the usual form, 5-aisled and about 110 ft. wide, and the nave only a little longer than its breadth. The arrangements of the choir are peculiar, owing apparently to the crypt being the principal object here, and the two entrances to it requiring a different disposition of parts to what is usually found. There is considerable dignity as well as grace in the arrangement of the 3 apses shown in the plan, which gives an expanse and importance to the holy of holies, which, though aimed at, was not attained in the Roman examples.

The pillars of the nave seem to have been borrowed from some earlier building, possibly the porticos of the temple at Jerusalem, and are connected by horizontal architraves, above which are a range of frescoes, now almost obliterated, but which were, in part at least, probably coeval with the church.[2] They are interesting to the archæologist, as showing the same scroll-work as is found in the contemporary church at Jerusalem, in the oldest buildings at Ravenna, and in those of Rome, where the ancient decorations still remain, by comparing which it would be easy to restore this style of decoration. As will be seen from the plan, the church possessed a narthex, with two lateral chapels and an atrium, destroyed probably when the cloisters, which are a mediæval addition, were erected to supply its place. Besides these the conventual buildings were extensive, but all probably of a more modern date.



403. Church of the Nativity at Bethlehem. From Bernardino Amici.

At Jerusalem we know, from the description of Eusebius, that Constantine erected two churches: one, called the Martyrion, was a 5-aisled basilica, probably very similar to the church at Bethlehem,

[1] Trattato delle Piante ed Imagine di Sacri Edifizi di Terra Santa. Firenze, 1620. I do not feel quite sure that I have correctly understood the measurements. I have taken the Neapolitan palm at .865 ft. English, but the author gives 10 of these to a canna, which is now only 6.9; his quotations, however, are all in palms, so I presume this is the principal measure with him.

[2] Published by Campini, de Edif. Constantini.

except that no mention is made of a transept; but having merely a verbal description, it is not easy to understand many of its parts. At present we must accept the church just described as a specimen of a rectangular church, instead of entering into the question of its details, which is open to considerable controversy.

One fragment of this great basilica only remains in the outer gateway of the Atrium, now known as the Golden Gateway. Externally

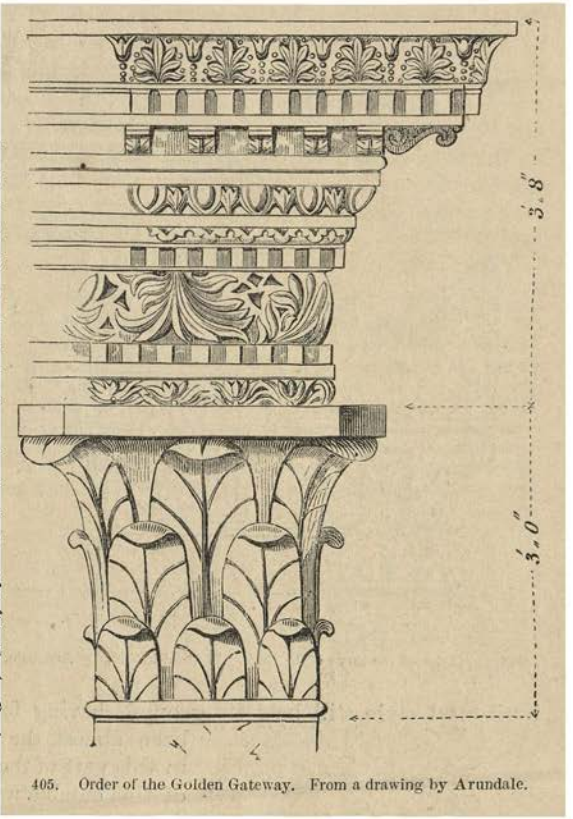
404. Interior of the Golden Gateway. From a drawing by Catherwood. Originally published in Fisher's 'Oriental Album.'

it presents all the characters of transition so strongly marked in the buildings of Diocletian at Spalatro (woodcut No. 246). The principal arches spring from the capitals of Corinthian pillars, and the whole entablature is bent round the arch instead of the architrave only, as was the case previously. Internally the same transitional character is preserved. The entablature, as shown in the woodcut No. 404, is carried along the wall from pilaster to pilaster as a mere ornament, under

an arch which is, as in the mosque of Omar, the real constructive form of the roof. The order is still purely Corinthian, but of so debased a character, that it could not have been executed even in the East before the time of Constantine, and as certainly cannot belong to the age of Justinian, or to any time approaching his period, as will be seen hereafter.

The Ionic order in the centre is of a more debased character, but not unlike some of the latest specimens in Rome, and may have been copied from some local types, the original of which we do not now possess.

The building now known as the mosque of Omar,[1] or more correctly as the Dome of the Rock, is another church of this age, and being of a circular form it supplies those particulars which the church of Bethlehem, from its form, could not give, to enable us to judge of the style of that age in Syria. Fortunately it has been measured and drawn with the utmost accuracy by two English architects, Messrs. Catherwood and Arundale, who obtained access to it during the ascendency of Mahomet Ali in Syria.

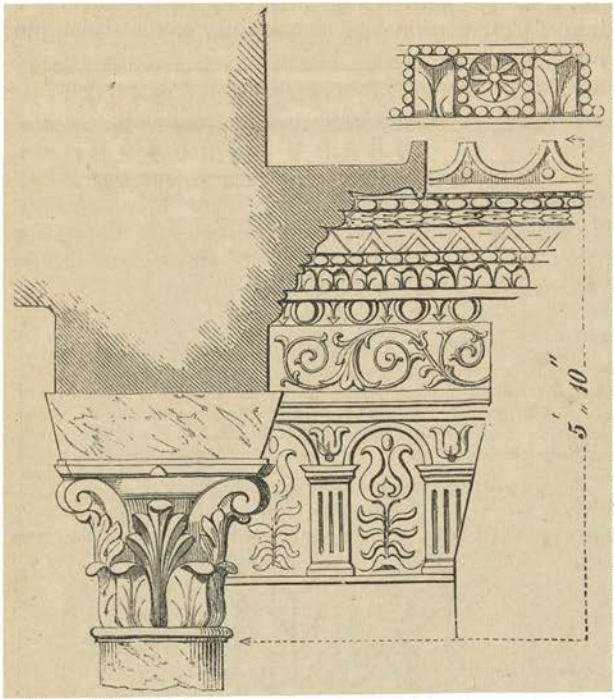


405. Order of the Golden Gateway. From a drawing by Arundale.

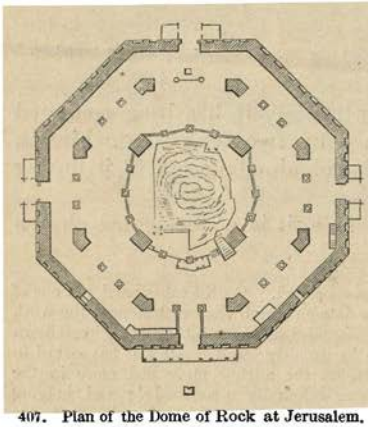
As will be seen from the annexed plan, it is an octagonal church

[1] In the year 1847 the author published a work entitled 'Essay on the Ancient Topography of Jerusalem,' the object of which was to prove that the building now called the Mosque of Omar was the identical church raised over the sepulchre of our Lord by Constantine. Since that work was published several explorations have taken place, and many new facts have been brought to light bearing on the question. All these, without one single exception, serve to confirm the facts therein stated. On the other hand, not one of the data on which the conclusions in the work are founded has been either refuted or shewn to be unfairly used. All this has served to confirm the author more and more in the views originally propounded; and judging from the data before him, they do not, to his mind, admit of a shadow of doubt. As the case, however, with the public is still *sub judice*, it has not been thought proper to introduce the controverted facts into the text.

of the first class, 148 ft. in diameter internally—the central dome, 66 ft. in diameter, being supported by a circle of 12 pillars, with 4 great piers, the outer circle having 16 pillars and 8 piers. The pillars are all of the Corinthian order, those of the inner circle being the largest, and supporting arches like those in the contemporary Roman buildings. The outer pillars are connected by an architrave placed horizontally under the springing of the arches, designed evidently as an ornament, as in the Golden Gateway, because in that early age of Christian art the horizontal style still held its ground, having for nearly 2000 years been almost the only one practised in this part of the world. The details of this entablature (woodcut No. 406) are somewhat confused and overloaded, but not more so than those found in Diocletian's palace at Spalatro, or the contemporary buildings in Rome. Altogether they are of singular elegance, though the transitional character of the architecture cannot be defended either as a beauty or as a model for imitation. Above the inner circle of columns is a highly ornamented belt, and over that a clerestory—the ornaments being in raised stucco-work, heightened in effect with colour, being the only instance of a complete decoration of the sort remaining entire and perfect to the present day; for though the dimensions and disposition



406. Order of the Dome of the Rock. From a drawing by Arundale.



407. Plan of the Dome of Rock at Jerusalem. From Catherwood and Arundale. Scale 100 ft. to 1 in.

of this part are repeated frequently in Rome and elsewhere, as we have already had occasion to remark, it is almost always more or less defaced. The baptistery at Ravenna is similar both in style and form, but that is only painted, I believe, on a flat ground.

The present dome was built, or at least thoroughly repaired, some two centuries ago by the sultans of Constantinople, and differs in detail from its base, and probably in form also from the original covering. The slightness of the walls proves incontestably that the central roof must always have been of wood; so also was and is the ceiling of the aisles, which remain nearly in the state in which they were put up in the 4th century. Under the central dome the living rock, as shown in the plan (woodcut No. 407), still stands, some 15 ft. above the bases of the columns that surround it.[1]

[1] The church of St. John at Damascus was one of the large Syrian churches of which it is generally supposed sufficient remains still exist in the present mosque to admit of their being restored. A plan and some photographs recently brought home by Mr. Porter dispel this illusion, and confirm the statements of Jelal-ud-din, who states that the Caliph Al Walid, A.H. 86, entirely destroyed the Christian church before commencing the building of his mosque. Apparently all that remains of Christian times is the western portal of the atrium of the church, a fragment of some of the lateral entrances now built into the southern wall of the mosque. As far as can be judged from such drawings as have been made, these are identical in style with the Golden Gateway and Dome of the Rock at Jerusalem, and belong to the beginning of the 4th century, A.D.

BOOK II.

LOMBARD AND RHENISH ARCHITECTURE.

CHAPTER I.

LOMBARD ARCHITECTURE.

CONTENTS.

Lombardy — Historical notice — Church of San Antonio, Piacenza — Churches at Novara, Pavia, Milan, Verona — Campaniles.

CHRONOLOGY.

	DATES.		DATES.
Charlemagne	A.D. 768	Conrad the Salique	A.D. 1024
Louis le Débonnaire	814	Henry III.	1039
Lothaire I.	840	Henry IV.	1056
Louis II.	855	Henry V	1106
Louis III	899	Lothaire II.	1125
Conrad I. Hohenstaufen	911	Conrad III.	1138
Henry the Fowler	918	Frederick Barbarossa	1152
Otho the Great	936	Henry VI.	1190
Otho II.	973	Frederick II.	1212
Otho III.	983	Conradin	1250
Henry II.	1002	Rudolph of Hapsburg	1273

Even before the time when Alaric poured his destructive hordes into the fertile plains of Italy, large bodies of German barbarians seem to have settled themselves in the valley of the Po. After the campaigns of Alaric and Alboin, whole tribes, under the names of Goths, Ostrogoths, or Lombards, attracted by the amenity of the climate and the richness of the soil, and encouraged by the weakness and effeminacy of the inhabitants, poured in one continuous stream across the Alps, not only as conquerors but as colonists. They brought with them their wives and families, and prepared to desert for ever the forests where they and their forefathers had long dwelt, to settle on what was then as now the most fertile and most beautiful of all the plains of Europe.

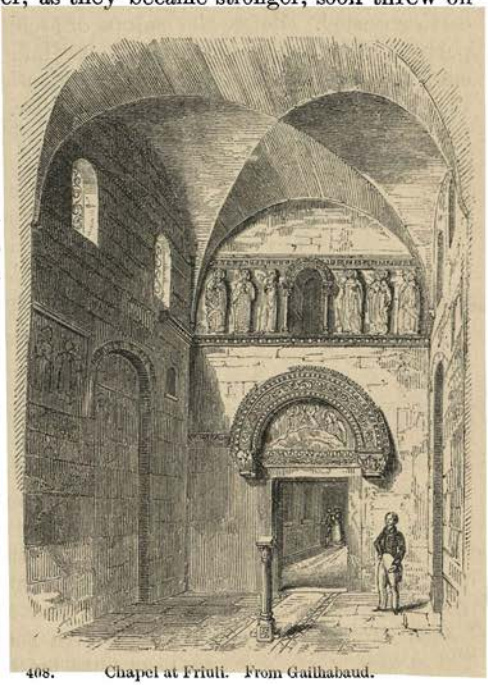
Before the age of Charlemagne the transformation was complete: the Alps were no longer the boundary between Germany and Italy. The valley of the Po was inhabited by the same races who occupied that of the Rhine. The civilisation of Rome was superseded, and the population which had long enjoyed slothful security under her imperial sway were either extinct, or so completely swamped by the tide of hardier and more energetic races from the North, that we almost

lose sight of them, and we may hereafter regard the whole valley of the Po, and the whole of the central part of Italy, at least as far south as Spoleto, far more as a part of the rising empire of the North, rather than a remnant of the fallen power of Rome.

In such a state of things the philosophical student of architecture will of course expect to find this radical change as distinctly and as strongly impressed on the architecture of the land as upon either its history or its manners and language—nor will he be disappointed. The change is distinct and clear. Indeed, there is no chapter in the history of architecture in which, from our knowledge of previous and of contemporary styles, the ebb and flow of various races can be so clearly and so easily followed as in that of the Lombard races of the north of Italy.

At first, when the barbarians were few, and the Roman influence still strong, they of course were forced to adopt the style of their predecessors, and to employ Italian builders to execute for them works which, as barbarians, they were themselves incapable of producing. This state of things continued in Ravenna, Florence, Pisa, and other cities, which long after their subjection to the barbarian rule still retained their old population and old traditions, and amongst them, as we have just seen, their old Romanesque style.

The barbarians, however, as they became stronger, soon threw off the trammels of an art with which they had no sympathy, to adopt one which expressed their own feelings, and was better adapted to their purposes; and although the old influence still lay beneath, and occasionally even came to the surface, the art of those ages was Gothic in all essentials, and remained so during nearly the whole period of the middle ages.

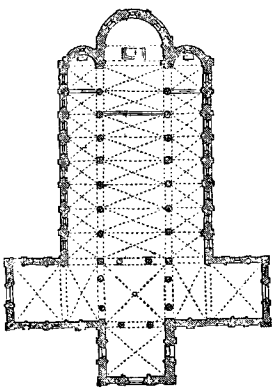


408. Chapel at Friuli. From Gailhabaud.

It is easy to trace the general outline of these changes, but very difficult to fix and settle either the date in which they took place or the mode in which they were effected, owing to the singular paucity of authentic monuments of the strictly Lombard period. Indeed, except one little chapel at Friuli, there is scarcely a single building belonging to this style which remains unaltered to the present day, and whose date is anterior to the 11th century.

The chapel at Friuli, though extremely small, being only 18 ft. by 30 inside the walls, is interesting, as retaining all its decorations almost exactly as they were left by Gertrude, duchess of Friuli, who erected it in the 8th century. It shows considerable elegance in its details, and the sculpture is far better than it afterwards became, though perhaps its most remarkable peculiarity is the intersecting vault that covers it (*pulchre testudinatum*, as the old chronicle terms it), showing how early was the introduction of a feature which afterwards became the formative principle of the whole Gothic style, and as essentially its characteristic as the pillars and entablatures of the five orders were the characteristics of the classical styles of Greece and Rome. It is essential to remark this, and to bear it in mind even here; for in all the subsequent remarks on Gothic architecture, it is this necessity for a stone roof that was the problem to be solved by the architects, and to accomplish which the style took almost all those forms which are so much admired in it.

From this example of the Carlovingian era we are obliged to pass to the 11th and 12th centuries, the great building age of the Gothic nations. It is true, nevertheless, that there is scarcely a single important church in Pavia, in Verona, or indeed in any of the cities of Lombardy, whose original foundation cannot be traced back to a much earlier period. Before the canons of architectural criticism were properly understood, antiquaries were inclined to believe that in the edifices now existing they saw the identical edifices erected during the period of the Lombard sway. Either, however, in consequence of the rude construction of the earlier buildings, or because they were too small or too poor for the increased population and wealth of the cities at a later period, every one of those original churches has disappeared and been replaced by a larger and better constructed edifice, adorned with all the improvements which the experience of centuries had introduced into the construction of religious edifices.



409. Plan of San Antonio, Piacenza. From Osten.[1] Scale 100 ft. to 1 in.

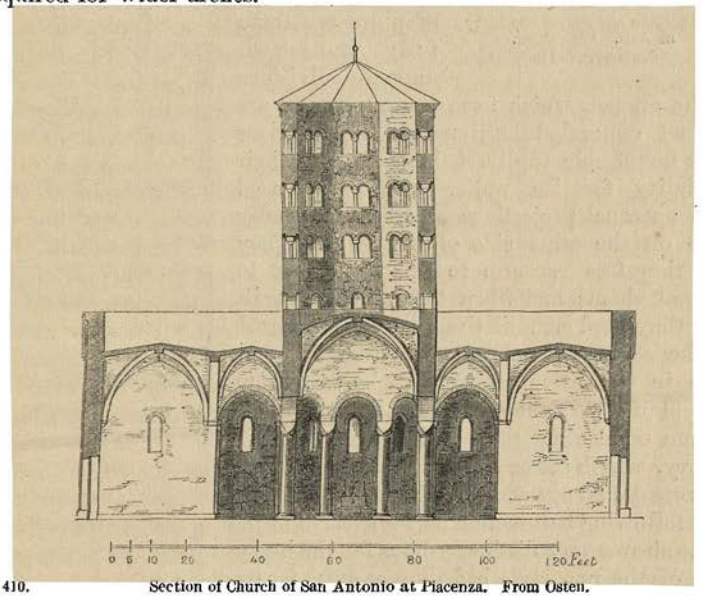
Judging from the rudeness of the earliest churches which we meet with erected in the 11th century, it is evident that the progress that had been made, up to that period, was by no means equal to what was accomplished during the next two centuries.

This will appear from the plan and section of St. Antonio at Piacenza (woodcuts Nos. 409 and 410), built in the first years of the 11th century, and dedicated in the year 1014 by the bishop Siegfried.

Its arrangement is somewhat peculiar, the transepts being near the west end, and the octagonal tower rising from the intersection sup-

[1] Frederick von Osten, Bauwerke in der Lombardei.—Darmstadt, 1852.

ported on 8 pillars, and the square completed by 4 polygonal piers. The principal point, however, to observe is, how completely the style has emancipated itself from all Roman tradition. A new style has grown up as essentially different from the Romanesque as is the style of Cologne or York cathedral. The architect is once more at liberty to work out his own designs without reference to anything beyond the exigencies of the edifices themselves. The plan indeed is still a reminiscence of the Romanesque; but so are all the plans of Mediæval cathedrals, and we may trace back the forms of the pillars, of the piers, and the arches they support, to the preceding style. All these are derived from Roman art, but the originals are forgotten, and the new style is wholly independent of the old one. The whole of the church too is roofed with intersecting vaults, which have become an integral part of the design, giving it an essentially Gothic character. On the outside buttresses are introduced, timidly, it is true, but so frequently, that it is evident that there is already no objection to increase either their number or their depth, as soon as additional strength is required for wider arches.

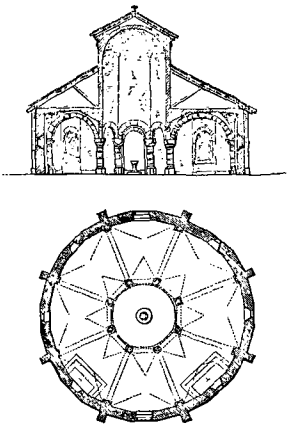


410. Section of Church of San Antonio at Piacenza. From Osten.

The windows, as in all Italian churches, are small, for the Italians never patronized the art of painting on glass, always preferring frescoes or paintings on opaque grounds. In their bright climate, very small openings were all that were required to admit a sufficiency of light to produce that shadowy effect which is so favourable to architectural grandeur.

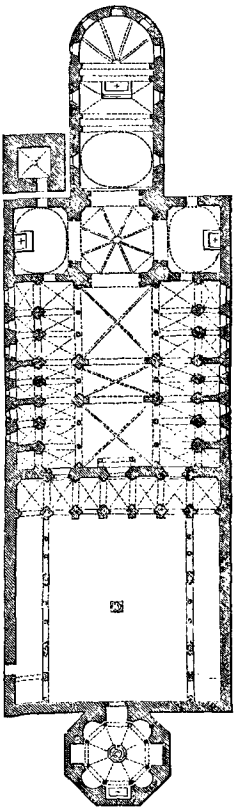
Being a parochial church, this building had no baptistery attached to it; but there is one at Asti so similar in style and age, that its plan and section, with those of San Antonio, will give a very complete

idea of Lombard architecture in the beginning of the 11th century, when it had completely shaken off the Roman influence, but had not yet begun to combine the newly invented forms with that grace and beauty which mark the more finished examples of the style. A peculiarity of this building is the gloom that reigns within, there being absolutely no windows in the dome, and those in the aisles are so small, that even in Italy the interior must always have been in comparative darkness.



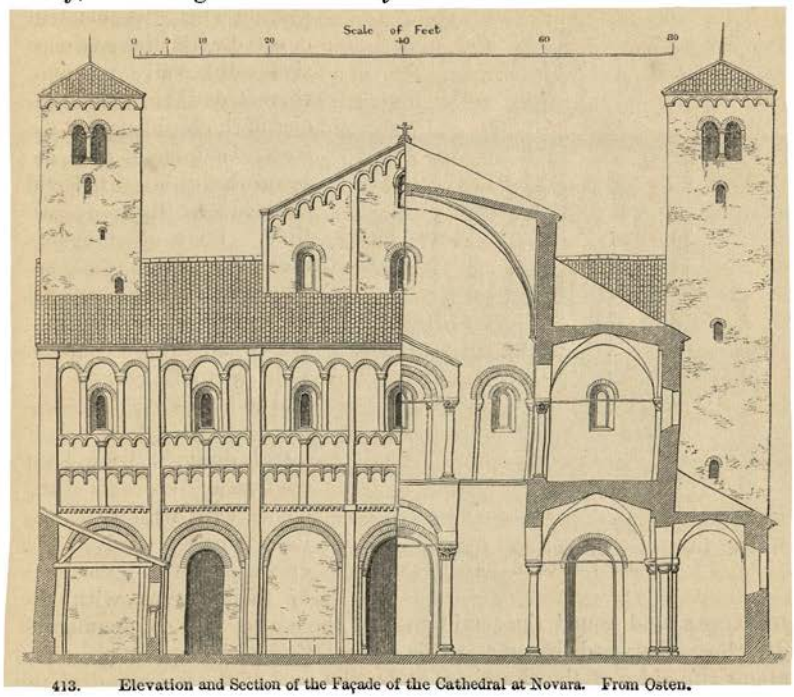
411. Section and Plan of Baptistery at Asti. From Osten. Scale 50 ft. to 1 in.

The cathedral of Novara, which in its present state is one of the most important buildings of the 11th century in the north of Italy, shows the style still further advanced. The coupling and grouping of piers are there fully understood, and the divisions of the chapels which form the outer aisle are in fact concealed buttresses. The Italians were never able to divest themselves of their partiality for flat walls, and never used bold external projections, as was universally done on the other side of the Alps. They had therefore recourse to this expedient to conceal them; and when this was not available they used metallic ties to resist the thrust of the arches—an expedient which is found even in this example. As will be seen from the plan (woodcut No. 412), it retains its atrium connecting the basilica with the baptistery, which seems to have been the almost universal arrangement in these early times. The following half-section half-elevation of the front shows very distinctly how far the invention of the new style had then gone; for except some Corinthian pillars, borrowed from an older edifice, no trace of Romanesque architecture is to be found here. The design of the façade explains what it was that suggested to the Pisan architects the form to which they adapted their Romanesque details. In both styles the arcade was the original model from which the whole system of ornamentation was taken. Here it is used first as a discharging arch, then as a mere repetition of a useful member, and lastly without pillars, as a mere ornamental string-course,



412. Plan of the Cathedral at Novara. Scale 100 ft. to 1 in.

which afterwards became the most favourite ornament, not only in Italy, but throughout all Germany.



413. Elevation and Section of the Façade of the Cathedral at Novara. From Osten.

Interesting as such an example as this is to the architectural antiquary who is tracing back and trying to understand the forms of a new style, it would be difficult to conceive anything much uglier and less artistic than such a façade as this of Novara or that of San Antonio, last quoted. Their sole merit is their history and their expression of rude energy, so characteristic of the people who erected them.

The baptistery is of older date than the cathedral, probably anterior to the age of Charlemagne; and if it had any features which could properly be called architectural, it ought perhaps to rank among Romanesque buildings. In plan it certainly belongs to that class. Its chief point of interest, however, is that it contains the germ of those external galleries under the roof which form not only one of the most common but certainly the most beautiful feature of the class of buildings of which we are now treating.

From the elevation (woodcut No. 414) it will easily be seen what was the motive and use of this arrangement, the first trace of which dates perhaps as far back as the baptistery at Nocera (woodcut No. 391) quoted above; for wherever a wooden roof was placed over a circular vault, it is evident that the external walls must be carried up higher than the springing of the arch. But it was by no means necessary that this additional wall should be so solid as that below, and it was neces-

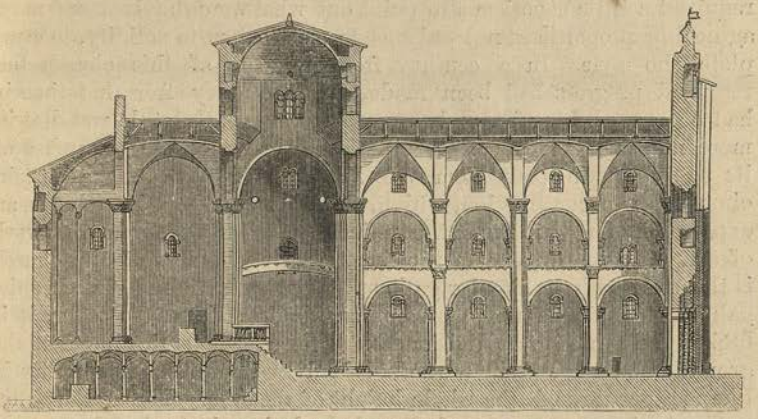
sary to introduce light and air into the space between the stone and the wooden roofs. We may add to this the incongruity of effect in placing a light wooden roof covered with tiles on a massive solid wall: not only therefore did the exigencies of the building, but the true principles of taste, demand that this part should be made as light as possible. Such openings as these found in the baptistery at Novara suggested an expedient which provided for these objects. This was afterwards carried to a much greater extent. At first, however, it seems only to have been used under the roofs of the domes with which the Italians almost universally crowned the intersections of their naves with the transepts, and round the semidomes of the apses; but so enamoured did they afterwards become of this feature, that it is frequently carried along the sides of the churches, under the roof of the nave and of the aisles, and also—where the taste of it is more questionable—under the sloping eaves of the roof of the principal façade.

414. Half Section, half Elevation, of the Baptistery at Novara. From Osten. No scale.

There is nothing in the style of which we are now speaking either so common or so beautiful as these galleries. These arcades have all the shadow which a cornice gives without its inconvenient projection, and the little shafts with the elegant capitals and light archivolts have a sparkle and brilliancy which no cornice ever possessed. Indeed, so beautiful are they, that we are not surprised to find them so universally adopted; and their discontinuance when the pointed style was introduced was one of the greatest losses sustained by architectural art in those days. It is true they would have been quite incompatible with the thin walls and light piers of the pointed styles; but it may be safely asserted that no feature which those new styles introduced was equally beautiful with these galleries which they superseded.

The church of San Michele of Pavia, which took its present form either at the end of the 11th or beginning of the 12th century, is one of the most interesting of this age, and presents in itself all the features of a perfect round-arched Gothic church. Indeed there is hardly any feature worth mentioning which was invented after this date except the pointed arch (which was a very doubtful improvement) and window tracery, which the Italians never cordially adopted or understood. The section given in woodcut No. 415 shows its general

arrangement, from which it will be seen that well-marked vaulting-shafts spring from the floor to the roof, that the pier arches in the wall are perfectly distinct and well-understood features, that the angles of the piers are softened and ornamented by shafts and other ornamental



415. Section of San Michele, Pavia. From Agincourt. No scale.

416. View of the Apse of San Michele, Pavia. From Dusomerard, les Arts au Moyen Age.

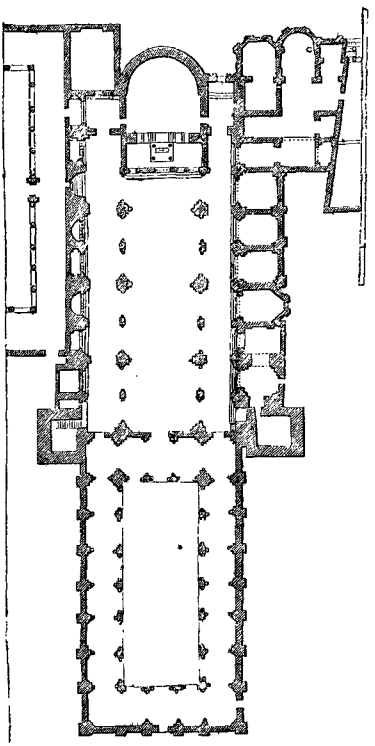
arrangements. Altogether, it is evident that that subdivision of labour (if I may use the expression) which was so characteristic of the true Gothic style had here been perfectly understood, every part having its own function and telling its own story. It only now required a little experience to point out what were the best and most agreeable proportions, not only as to size, but as to solidity, to complete the style. In a century from the date of this church the required progress had been made, and a century after that time it had been carried too far, and the artistic value of the style was lost in mere masonic excellence. San Michele and the other churches of its age fail principally from over-heaviness of parts and a certain clumsiness in construction, which, though not without its value as an expression of power, wants the refinement necessary for a true work of art. Externally, one of the most pleasing features of this church is the apse with its circular gallery. Usually in Italian churches the gallery is a simple range of similar arcades; here, however, it is broken into three great divisions by coupled shafts springing from the ground, and these again are subdivided by single shafts running in like manner through the whole height of the apse. The gallery thus not only becomes a part of the whole design, instead of looking as if it might have been added as an afterthought, but an agreeable variety is also given, which adds not a little to the pleasing effect of the building.

Besides this, there are at least two other churches in Pavia which, though altered in many parts, retain their apsidal arrangements tolerably perfect. One of these, that of San Teodoro, may be somewhat older than the San Michele, and has its gallery divided into triplets of arcades by bold flat buttresses springing from the ground. The other, San Pietro in Cielo d'Oro, is considerably more modern, the arcade being omitted round the apse, though introduced in the central dome. It has besides two subordinate apses of graceful design, though inferior to the older examples.

Though Milan must have been rich in churches of this age, the only one that now remains tolerably entire is San Ambrogio, which is so interesting a church as almost to make amends for its singularity. Historical evidence shows that a church did exist here from a very early age. This was rebuilt in the 9th century by Anspertus, a bishop of the time, aided by the munificence of Louis the Pious; but except the apse and the older of the two towers—that of the canons—nothing remains of even that church, all the rest having been rebuilt in the 12th century. The vaulting of the church, which is singularly clumsy, and clumsily fitted to the substructure, is the work of the 13th century.

The disposition of this church will be understood from the following plan, which shows the atrium as well as the church, the former being virtually the nave. In other words, had the church been erected on the colder and stormier side of the Alps, a clerestory would have been added to the atrium, and it would have been roofed over; and then the plan would have been nearly identical with that of one of our

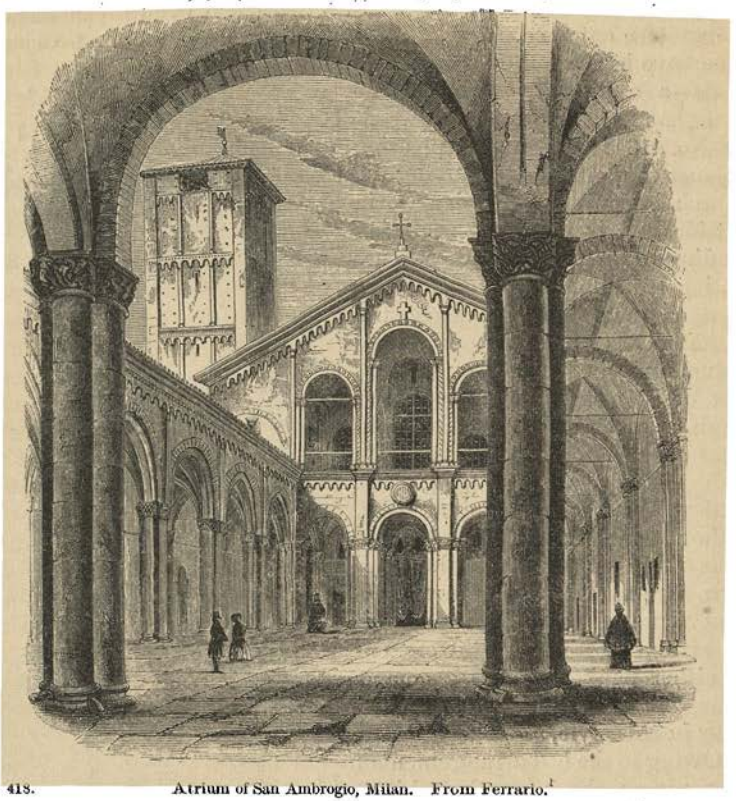
Northern cathedrals. If, besides this, there had been a baptistery at the western entrance, as at Novara, Piacenza, or Torcello, we should then have had a building with two apses—a complete German cathedral. As it is, the atrium (woodcut No. 418) is a singularly pleasing adjunct to the façade, removing the church back from the noisy world outside, and by its quiet seclusion tending to produce that devotional feeling so suitable to the entrance of a church. The façade of the building itself, though, like the atrium, only in brick, is one of the best designs of its age, the upper loggia or open gallery of five bold but unequal arches spaced equally with those below, producing more shadow than the façade at Pisa, without the multitude of small parts there crowded together, and with far more architectural propriety and grace. As seen from the atrium with its two towers, one on either flank, it forms a composition which is not surpassed by any other in this style, so far as I know.



417. Plan of San Ambrogio, Milan. From Ferrario. Scale 100 ft. to 1 in.

Owing to the bad arrangement of the vaulting, the internal architecture of the church is hardly worthy of that of the exterior; but it is a perfect museum of ecclesiological antiquities of the best class. The silver altar of Angilbertus (A.D. 835) is unrivalled either for richness or beauty of design by anything of the kind known to exist elsewhere, and the *baldachino* that surmounts it is also of singular beauty; so are some of its old tombs of the earliest Christian workmanship. Its mosaics, its pulpit, and the bronze doors, not to mention the brazen serpent, said to be the very one erected by Moses in the wilderness, and innumerable other relics, make this church one of the most interesting of Italy, if not indeed of all Europe.

Generally speaking, the most beautiful part of these Lombard churches is their eastern ends. The apse with its gallery, the transepts, and above all the dome that almost invariably surmounts their intersection with the choir, constitute a group which always has a pleasing effect, and very often is highly artistic and beautiful. The sides, too, of the nave are often well designed and appropriate; but, with scarcely a single exception, the west end, or entrance front, is comparatively mean. The building seems to be cut off at a certain length without any appropriate finish, or anything to balance the



418. Atrium of San Ambrogio, Milan. From Ferrario.[1]

bold projections towards the east. The French cathedrals, on the contrary, while they entirely escape this defect by means of their bold western towers, are generally deficient in the eastern parts, and almost always want the central dome or tower. The English Gothic architects alone understood the proper combination of the three parts. The Italians, when they introduced a tower, almost always used it as a detached object, and not as a part of the design of the church. In consequence of this the façades of their churches are frequently the least happy parts of the composition, notwithstanding the pains and amount of ornament lavished upon them.

The elevation of the cathedral at Piacenza (woodcut No. 419) is a fair illustration of the general mode of treating the western front of the building, not only in the 11th and 12th centuries, but afterwards, when a church had a façade at all, for the Italians seem to have been seldom able to satisfy themselves with this part of their designs, and in consequence a great many of their most important churches have not even now been completed in this respect.

[1] Ferrario, Monumenti Sacri e Profani dell' I. R. Basilica di S. Ambrogio. Milan, 1824.

Instead of recessing their doors, as was the practice on this side of the Alps, the Italians added projecting porches, often of considerable depth, and supported by two or more slight columns generally resting on the backs of symbolical animals. No part of these porches, as an architectural arrangement, can be deemed worthy of any commendation; for in the first place, a column planted on an animal's back is an anomaly and an absurdity, and the extreme tenuity of the pillars, as compared with the mass they support, is so glaring that even its universality fails in reconciling the eye to the disproportion. In the present instance the porch is two stories in height, the upper being a niche for sculpture. Its almost exact resemblance to the entrance porch below is therefore a defect. Above there is generally a gallery, sometimes only in the centre; sometimes, as in this instance, at the sides, though often carried quite across; and in the centre above this

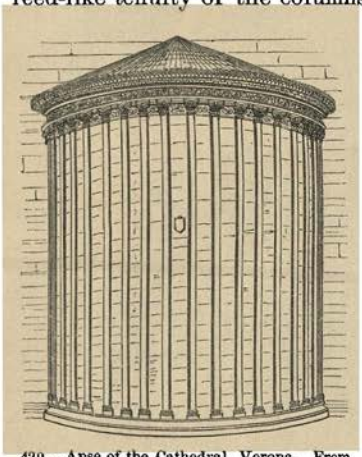
419. Façade of the Cathedral at Piacenza. From Chapuy, Moyen Age Monumental.

there is almost invariably a circular window, the tracery of which is frequently not only elaborately but beautifully ornamented with foliage and various sculptural devices.

Above this is here, and in many other instances, one of those open galleries mentioned before, following the slope of the roof, though frequently this is replaced by a mere belt of semicircular arches, suggesting an arcade, but in reality only an ornament.

Verona.

Almost every important city in Lombardy shows local peculiarities in its style, arising from some distinction of race or tradition. The greater number of these must necessarily be passed over in a work like the present, but some are so marked as to demand particular mention. Among these that of Verona seems the most marked and interesting. This Roman city was the favourite capital of Theodoric the Goth—Dietricht of Berne, as the old Germans called him—and was by him adorned with many noble buildings which have either perished or been overlooked. There is a passage in the writings of his friend Cassiodorus which has hitherto been a stumbling-block to commentators, but seems to find an explanation in the buildings here, and to point to the origin of a mode of decoration worth remarking upon. In talking of the architecture of his day he speaks of "the reed-like tenuity of the columns making it appear as if lofty masses of building were supported on upright spears, which in regard to substance look like hollow tubes."[1] It might be supposed that this referred exclusively to the metal architecture of the use of which we find traces in the paintings at Pompeii and elsewhere.[2] But the context hardly bears this out, and it is probable he refers to a stone or marble architecture, which in the decline of true art had aspired to a certain extent to imitate the lightness which the metallic form had rendered a favourite.



420. Apse of the Cathedral, Verona. From Hope's History of Architecture.

To return to Verona:—The apse of the cathedral seems to have belonged to an older edifice than that to which it is now attached, as was often the case, that being the most solid as well as the most sacred part of the building. As seen in the woodcut (No. 420), it is orna-

[1] "Quid dicamus columnarum junceam proceritatem? Moles illas sublimissimas quasi quibusdam erectis hastilibus contineri substantiæ qualitate concavis canalibus excavatas vel magis ipsas æstimes esse transfusas. Cæris judices factum quod metallis durissimis videas expolitum. Marmorum juncturas venas dicas esse genitales ubi dum falluntur oculi laus probatur crevisse miraculis." In the above *metallum* does not seem to mean metal as we now use the word, but any hard substance dug out of the ground.—Cassiodorus variorum, lib. vii. ch. 15.

[2] See p. 363.

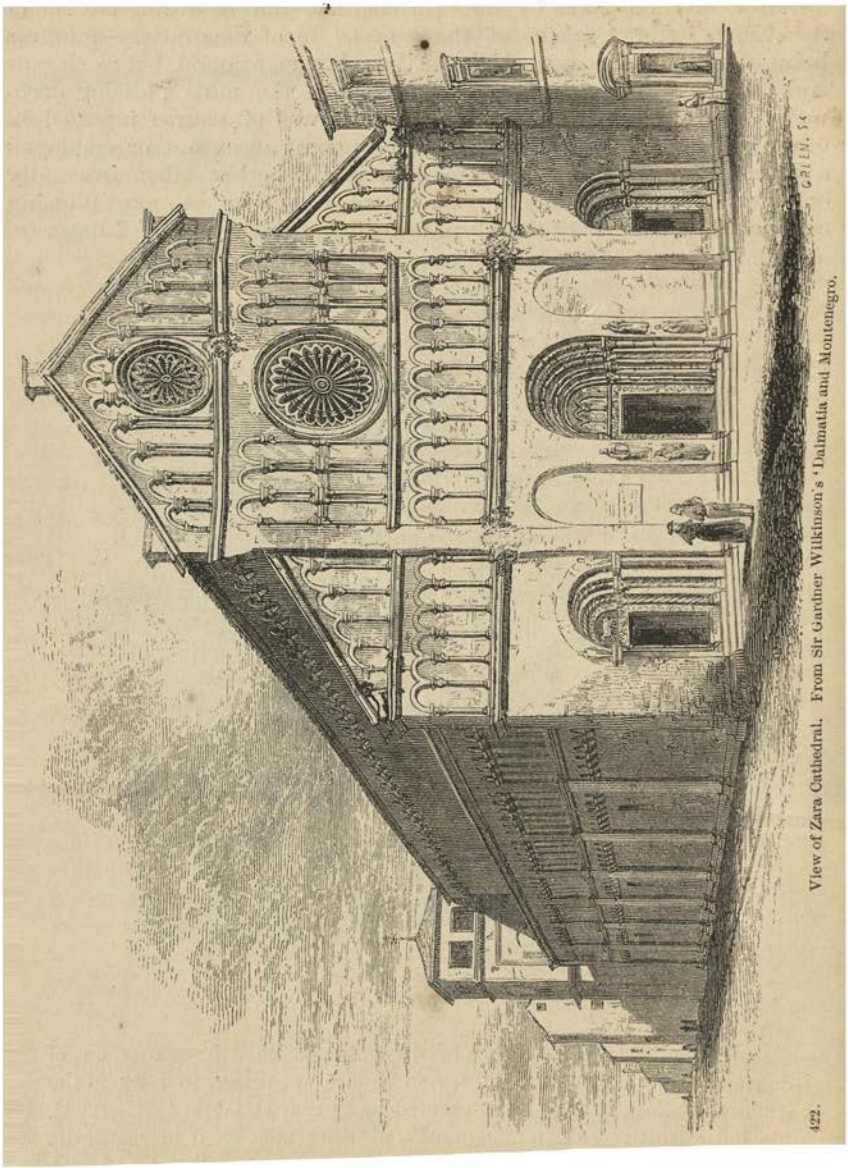
mented with pilasters, classical in design, but more attenuated than any found elsewhere; so that I cannot but believe that this is either one of the identical buildings to which Cassiodorus refers, or at least an early copy from one of them.

At a far later age, in the 12th century, the beautiful church of San Zenone shows traces of the same style of decoration—pilasters being used here almost as slight as those last mentioned, but so elegant and so gracefully applied as to form one of the most pleasing decorations of the style. Once introduced, it was of course repeated in other buildings, but seldom carried to so great an extent or employed so gracefully as in this instance. Indeed, whether taken internally or externally, San Zenone may be regarded as one of the most pleasing and perfect examples of the style to be found in the north of Italy.

421. Façade of San Zenone, Verona. From Chapuy.

It is wandering a little out of the geographical, though not out of the architectural, province of which we are speaking, to refer to the cathedral at Zara in Dalmatia, erected by Enrico Dandolo (1192-1204). This building presents a singularly pleasing specimen of the style. The central division being well marked, it avoids the flatness of such buildings as the cathedral of Piacenza, and of so many others in this style; and the arcades being mere ornaments, it escapes from the anomalies of the Pisan style, though it is easy to see that the two

styles are derived from the same original—the difference being that the cathedral of Pisa is a Romanesque, that of Zara a Gothic, modification of one style of architecture, the latter being by far the more consistent and satisfactory.



View of Zara Cathedral. From Sir Gardner Wilkinson's 'Dalmatia and Montenegro.'

422.

The cathedral at Modena is another good example of this style, though not possessing any features of much novelty or deserving special mention. That of Parma is also important, though hardly so pleasing.

Indeed scarcely any city in the valley of the Po is without some more or less perfect churches of this date, but none showing any important peculiarities that have not been exemplified above, unless perhaps it is the apse of the church of San Donato on the Murano near Venice, which is decorated with a richness of mosaic to which the purer Gothic style never attained, and which entitles this church to rank rather with the Byzantine than with the Gothic buildings of which we are treating.

It is extremely difficult to draw a line between the pointed and round arched Gothic styles in Italy—the former was so evidently a foreign importation, so unwillingly received and so little understood, that it made its way but slowly. Even, for instance, in the church at Vercelli, which is usually quoted as the earliest example of the pointed style in Italy (built 1219-1222), there is not a pointed arch nor a trace of one on the exterior. All the windows and openings are round-headed, and, except the pier-arches and vaults, nothing pointed appears anywhere. Even at a later date than this the round arch, especially as a decorative form, frequently is placed above, and always used in preference to the pointed one. Instead therefore of attempting to draw a line where none in reality exists, it will be better to pass on from this part of the subject now, and, on returning to Italy, to take up the older style at that point from which we can best trace the formation of the new. The latter does not essentially differ from the former, except in the introduction of the foreign French form of the pointed arch and its accompaniments, and this cannot well be understood without first explaining how it rose in France. It remains only to say a few words on the peculiarities which the round form of churches took in the hands of the early Lombard architects, and also a few words on the campanile, which forms so striking a feature in the cities of the north of Italy.

CIRCULAR CHURCHES.

In the earliest times of Christian architecture, as has been already seen, the circular form of church was at least as frequent as that derived from the Roman basilicas. The latter description was found in process of time much better adapted to the extended circumstances of Christianity. Hence in the 11th and 12th centuries, when so many of the early churches were rebuilt and enlarged, most of the old circular buildings disappeared. Still enough remain to enable us to trace, though imperfectly, what their arrangements were.

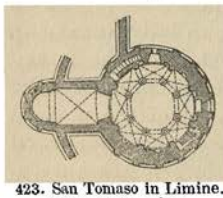
Among those which have been illustrated, perhaps the most interesting is that now known as the church of San Stephano at Bologna, or rather the circular centre of that congeries of seven churches usually known by that name.

It is one of those numerous churches of which it is impossible to predicate whether it was originally a baptismal or a sepulchral edifice. In old times it bore both names, and may have had both destinations, but latterly, at all events, the question has been settled by the com-

promise usually adopted in such cases, of dedicating it to the first martyr, to whom a sepulchral form is especially appropriate.

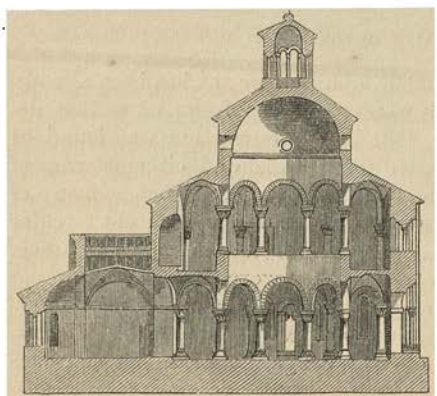
Notwithstanding a considerable amount of ancient remains mixed up in the details, no part of the present church seems older than the Carlovingian era; while, on the other hand, its extreme irregularity and clumsiness of construction point to a period before the 11th century. Its general form is that of an extremely irregular octagon, about 60 ft. in diameter, in the centre of which stands a circlet of columns, some coupled, some single, supporting a semicircular dome. The circumscribing aisle is covered with the usual intersecting ribbed vault of the 10th century, but the whole is so rude as scarcely to deserve mention except for its antiquity.

At Brescia there are two circular churches—one, the Duomo Vecchio, may be, at least the lower part of it, of very considerable antiquity, but the upper part has certainly been rebuilt at a more modern epoch. The other, the church of Sta. Julia, assumes the octagonal form above, and, as it at present stands, cannot be dated earlier than the 12th century: both, however, are small, and, though interesting, can hardly be called important. A better specimen than either of these is the church of San Tomaso in Limine, near Bergamo, which shows the style in all its completeness. From the annexed plan it will be seen that the circular part is the nave or entrance part, as in Germany and England, as contradistinguished from the French mode of arrangement, where the circular is always the sanctum, the rectangular the nave or less holy place.



423. San Tomaso in Limine. Scale 100 ft. to 1 in.

The general plan of this example is circular. It is not more than 30 ft. across internally. In the centre stand 8 pillars, supporting a vaulted gallery, forming a triforium or upper story, which, with the dome and its little cupola, raises the whole height to about 50 ft. A small choir with a semicircular niche projects, as will be seen, to the eastward.



424. San Tomaso. From Isabelle, Edifices Circulaires. Scale 50 ft. to 1 in.

The dimensions of the building are so small, that it hardly deserves notice, except as a perfect example of the style of the 11th or 12th century in Lombardy, and from a certain propriety and elegance of design, in which it is not surpassed, internally at least, by any building of its age. We must regret that the idea was never carried out (at any rate we have no example of its being so) on such a scale as to enable us to judge of the effect of such

a domical arrangement as is here attempted. The great defect of all one-storied domes is their lowness, both internally, and more especially externally. The method of building domes in two stories, as here, would seem calculated to obviate this objection; but though common in small sepulchral chambers, it has never been tried on a sufficiently large scale to enable us to judge of its real effect. After this period the circular shape was so completely superseded by the rectangular, that no further improvement took place in the former.

CAMPANILES.

There is no architectural feature which the Gothic architects can so justly call their own as the towers and spires which in the middle ages were not only so favourite, but so indispensable a part of their churches and other edifices, becoming in fact as necessary parts of the design externally, as the vaults were of the internal decoration of the building.

It is true, as before remarked, that we neither know where they were first invented, nor even where they were first used as applied to Christian churches—those of Rome or Ravenna being evidently not the earliest examples; and what is still more unfortunate, they have no features which betray their origin, at least none have yet been pointed out, though it is by no means impossible that a closer examination would bring some such to light. They certainly are as little classical, both in their forms and details, as anything can well be conceived to be; nor can the very name of Romanesque be considered entirely appropriate, though we are compelled to use it as marking the age and locality in which they occur.

Those of which we have already spoken are all church towers, *campaniles* or bell-towers attached to churches. But this exclusive distinction seems by no means to apply to the Gothic towers. The tower of St. Mark at Venice, for instance, and the Toraccio at Cremona, are evidently civic monuments, like the belfries of the Low Countries—symbols of communal power wholly distinct from the church, their juxta-position to which seems only to be owing to all the principal buildings being grouped together. This is certainly the case with a very large class of very ugly buildings in Italy, such as those attached to the town-halls of Florence and Sienna, or the famous Assinelli and Garisenda towers at Bologna. These are merely tall square brick towers, with a machicolated balcony at the top, but possessing no more architectural design than the chimney of a cotton factory. Originally, when lower, they may have been towers of defence, but afterwards became mere symbols of power.

There is a third class, and by far the most numerous, which are undoubtedly ecclesiastical erections; they are either actually attached to the churches, or so placed with regard to them as to leave no doubt on the matter. There is not, however, I believe, in all Italy, a single example of a tower or towers used, as on this side of the Alps, as integral parts of the design.

Sometimes they stand detached, but more generally are attached to

some angle of the building, the favourite position being the western angle of the southern transept. Sometimes we find one tower placed at the angle of the façade, but this is seldom the case when the tower and the church are of the same age. It is so in the cathedral at Lucca, and San Ambrogio at Milan; and in the latter instance a second tower has been added at a later date to balance the older one. It does also happen, as in the instance of Novara, before quoted (woodcut No. 413), that two towers are actually parts of the original design; this, however, is certainly the exception, not the rule.

In design the Italian campaniles differ very considerably from those on this side of the Alps. They never have projecting buttresses, nor assume that pyramidal form which is so essential and so beautiful a feature in the northern examples. In plan the campanile is always square, and carried up without break or offset to two-thirds at least of its intended height. This, which is virtually the whole design (for the spire seems an idea borrowed from the north), is generally solid to a considerable height, or with only such openings as serve to admit light to the stairs or inclined planes. Above this solid part one round-headed window is introduced in each face, and in the next story two; in the one above this three, then four, and lastly five, the lights being merely separated by slight piers, so that the upper story is virtually an open loggia. There is no doubt great beauty and propriety of design in this arrangement; in point of taste it is unobjectionable, but it wants the vigour and variety of the Northern tower.

So far as we can judge from drawings and such ancient examples as remain, the original termination was a simple cone in the centre, and a smaller one at each of the four angles.

At Verona an octagonal lantern is added, and at Modena and Cremona the octagon is crowned by a lofty spire, but these hardly come within the limits of the epoch of which we are now treating. So greatly did the Italians prefer the round arch, that even in their imitation of the Northern styles they used the pointed shape only when compelled. This circumstance makes it extremely difficult, particularly in the towers, to draw the line between the two styles; for though pointed arches were no doubt introduced in the 13th and 14th centuries, the circular-headed shape continued to be employed from the age of the Romanesque to that of the Renaissance.

One of the oldest, and certainly the most celebrated of the Gothic towers of Italy, is that of St. Mark's at Venice, commenced in the year 902; it took the infant republic 3 centuries to raise it 180 ft., to the point at which the square basement terminates. On this there must originally have been an open loggia of some sort, and no doubt with a conical roof. The present superstructure was added in the 16th century, and though the loggia is a very pleasing feature, it is overpowered by the solid mass that surmounts, and by the extremely ugly square extinguisher that crowns the whole. Its locality and its associations have earned for it a great deal of inflated laudation, but in point of design no campanile in Italy deserves it less. The base is a mere unornamented mass of brickwork, slightly fluted, and pierced unsym-

metrically with small windows to light the inclined plane within. Its size, its height, and its apparent solidity are its only merits. These are no doubt important elements in that low class of architectural excellence of which the Egyptian pyramids are the type; but even in these elements this edifice must confess itself a pigmy, and inferior to even a second-class pyramid on the banks of the Nile, while it has none of the beauty of design and detail displayed by the Giralda of Seville, and the other towers in its neighbourhood.

The campanile at Piacenza (woodcut No. 410) is, perhaps, more like the original of St: Mark's than any other, and certainly possesses as little beauty as any building of this sort can possess.

That of San Zenone at Verona is a far more pleasing specimen; and, indeed, is as beautiful both in its proportions and details as any of its age, possessing at once the beauties and the defects of the style. Among the first is an elegant simplicity that always is pleasing, but accompanied by a leanness and poverty of effect as compared with Northern examples, which must rank in the latter category.

The celebrated tower of the Ghirlandina at Modena is perhaps the example that enables us best to compare these Italian with the Cisalpine towers, as it possesses a well-proportioned spire which is found in few of the others.

In date it ought to belong to the second division of the subject, having been commenced in the 13th and finished in the 14th century; but as before remarked, there is no line of distinction between the round and pointed arched styles in Italy, and as this campanile seems to be wholly without any pointed forms, we may describe it here.

The whole height of the tower is about 315 ft., of which less than 200 are taken up in the square part—thus bearing a less predominant proportion to the spire than is found in any other Italian example, and evidently meant to rival the famous German spires which had become such favourites in the age in which it was built; and although it avoids many of the errors into which the excessive love of decoration and of "*tours de force*" led the Germans, still the result here is far from satisfactory. The change from the square to the octagon is abrupt and unpleasing, and the spire itself looks too thick for the octagon. Everywhere there is a want of those buttresses and pinnacles with which the Gothic architects knew so well how to prepare for a transition of form, and to satisfy the mind that the composition was not only artistically but mechanically correct. The Italians never comprehended the ultimate principle of the Gothic styles, and consequently, though they had far more elegance of mind and used better details, their works fail to satisfy almost as much as a modern classical church or museum.

The same remarks apply to the towers of Siena, Lucca, Pistoja, and indeed to all in the north of Italy: all have some points that please, but none is entirely satisfactory. None have sufficient ornament, nor display a sufficiency of design, to render them pleasing in detail, nor have they sufficient mass to enable them to dispense with the evidence of thought, and to impress by the simple grandeur of their dimensions.

CHAPTER II.

SWITZERLAND.

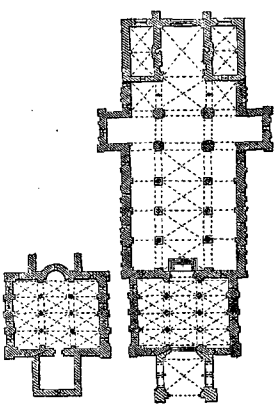
CONTENTS.

Church at Romain-Motier — Cathedral of Zurich — Ancient plan at St. Gall.

As a country lying between Italy on the one hand, and Germany on the other, and inhabited by races partaking of the characteristics of both, Switzerland ought to possess singular interest for the archæologist, more especially as its mountain fastnesses have protected it from the sudden inroads of the barbarians, and its poverty from the rebuildings, which are more fatal to the researches of the antiquarian than any destruction caused by the violence of enemies.

Hitherto tourists have been content to admire the beauties of the scenery, and it was not till the publication of the work of M. Blavignac that any means were available to the public for judging of the treasures of antiquity. The work referred to comprises only the western part of Switzerland, and the period anterior to the 11th century; still it suffices to show how rich the country is, and how much we may expect when it is more fully examined.

Among the churches illustrated in this work, one of the earliest and most interesting is that of Romain-Motier, the body of which certainly remains as it was when consecrated in the year 753. The narthex, which is in two stories, may be a century or two later, and the porch and east end are of the pointed style of the 12th or 13th centuries. The vaulting of the nave also can hardly be coeval with the original building.

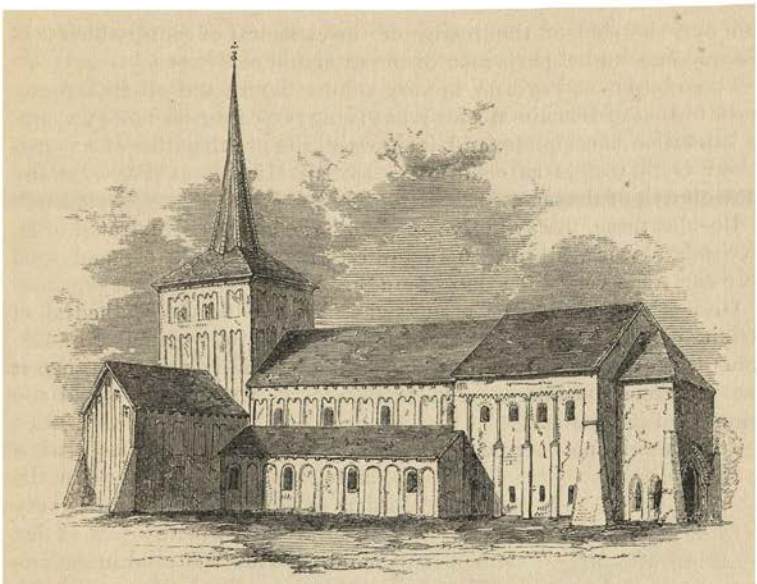


425. Plan of the Church of Romain-Motier. From Blavignac.[1] Scale 100 ft. to 1 in.

From other examples in the neighbourhood, we may safely infer that it originally terminated eastward in three apses. Supposing these to be restored, we have a church of about 150 ft. in length by 55 in width across the nave, with transepts, a tower at the intersection, and nearly all the arrangements found at a much later age, and with scarcely any details of the Romanesque style.

The external mode of decoration is very much that of the two

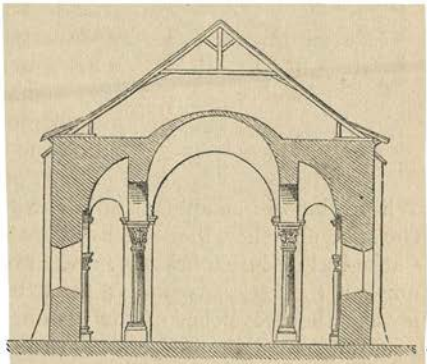
[1] Histoire de l'Architecture Sacrée du 4^{e} au 10^{me} Siècle dans les Evêchés de Genève, Lausanne, et Sion, 1853.



426. View of the Church of Romain-Motier. From Blavignac.

churches of San Apollinare at Ravenna, but carried one step further, inasmuch as in the upper story of the nave each compartment is divided into 2 arches, with no central support; in the tower there are 3 such little arches in each bay, in the narthex 5. This afterwards became in Germany and Italy the favourite string-course moulding.

The church of Granson, on the borders of the lake of Neufchatel, though much smaller, is scarcely less interesting. It belongs to the Carlovingian era, and like many churches of that age, has borrowed its pillars and many of its ornaments from earlier monuments. Its most remarkable peculiarity is the vault of the nave, which shows how timidly at that early period the architects undertook to vault even the narrowest spans, the whole nave being only 30 ft. wide. It is the earliest specimen we possess of a mode of vaulting which subsequently became very common in the south of France, and which, as we shall see hereafter, led to most of the forms of vaulting afterwards introduced.



427. Section of Church at Granson. From Blavignac.

The church of Notre Dame de Neufchatel, part of which is as old as from 927 to 954, presents also forms of beauty and interest. The

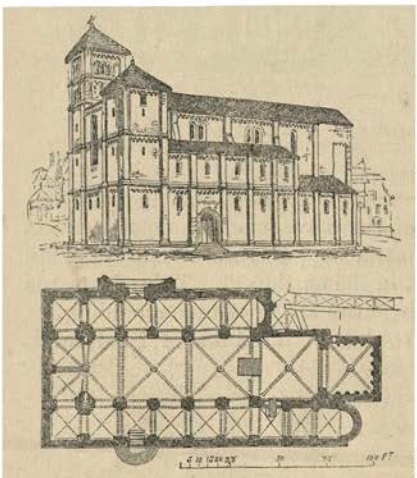
same may be said of the tower of the cathedral of Sion, which is of the same age, and of parts also of the cathedral of Geneva.

The church at Payerne is very similar in size and all its arrangements to that of Romain-Motier; but being two centuries more modern, the transition is complete, and it shows all the peculiarities of a round-arched Gothic style as completely as San Michele at Pavia, or any other church of that age.

Besides these, there are five or six other churches illustrated in M. Blavignac's work, all presenting interesting peculiarities, and from their early age very deserving of study.

One other building of a somewhat later date, the Cathedral of Zurich, of which a view and plan are given in woodcut No. 428, seems to have attracted much attention, but certainly not more than it deserves from the interest due to its architectural beauties and the elegance of its details.

Its date is not correctly known; for though it seems that a church was founded here in the time of Otho the Great, it is very uncertain whether any part of that building is incorporated in the present edifice, the bulk of which is evidently of the 11th or 12th centuries. The arrangement and details of the nave are so absolutely identical with those of San Michele at Pavia,[1] that both must certainly belong to the same epoch, as they do to the same architectural province. But in this church we meet with several German peculiarities which it may be well to draw attention to at once, as we shall have frequent occasion to refer to them hereafter.



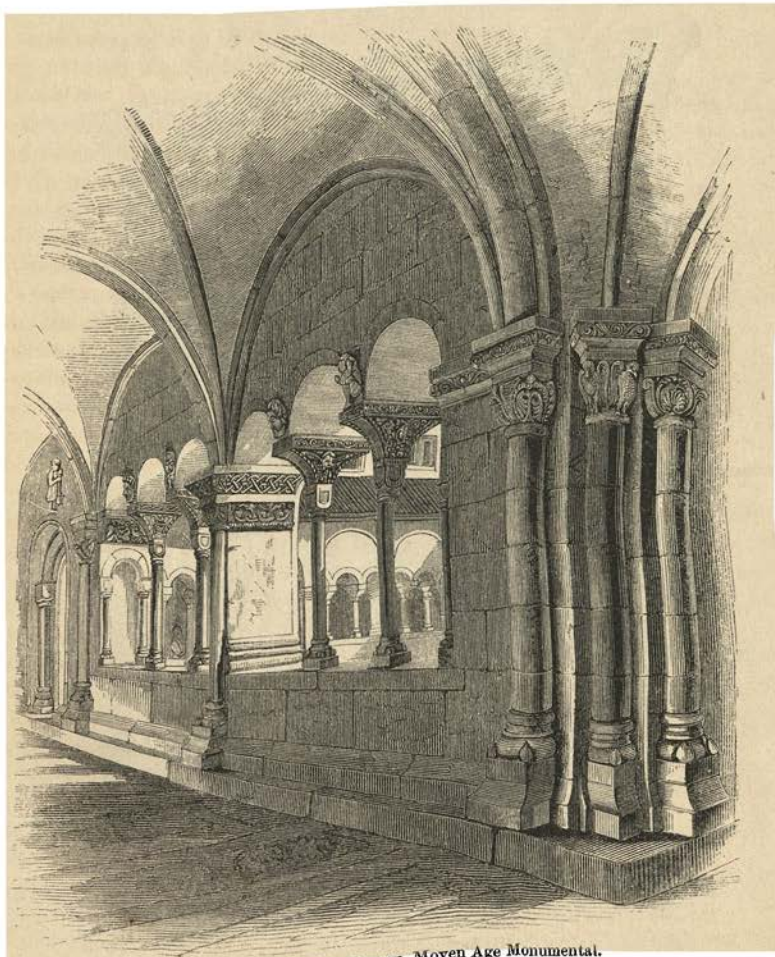
428. View and Plan of the Cathedral at Zurich. From Voseltin.

The first of these is the absence of any entrance in the west front. Where there is an apse at either end, as is frequently the case in the German churches, the cause of this is perfectly intelligible; but the Cathedral of Zurich has not, and never had, an apse at the west end, nor can I suggest any motive for so unusual an arrangement, unless it is that the prevalence of the plan of two apses had rendered it more usual to enter churches in Germany at the side, and it was consequently adopted even where the true motive was wanting. In an architectural point of view it certainly is a mistake, and destroys half the effect of the church both internally and externally; but, as we shall afterwards see, it was very common in Germany before they learnt from the French to make a more artistic arrangement of the parts.

[1] See p. 537.

Another peculiarity is the distinct preparation for two towers at the west end, as proved by the two great piers, evidently intended to support their inner angles. Frequently in Germany the whole west end was carried up to a considerable height above the roof of the nave, and either two or three small spires placed on this frontal screen. This, however, does not appear to have been the case here; for though the two towers that now adorn it are modern, the intention seems originally to have been the same. Had they been intended to flank the portal, and give dignity to the principal entrance, their motive would have been clear; but where no portal was intended, it is curious that the Germans should so universally have used them, while the Italians, whose portals were almost as universally on their west fronts, should hardly ever have employed this arrangement.

The east end, as will be observed, is square, an arrangement not

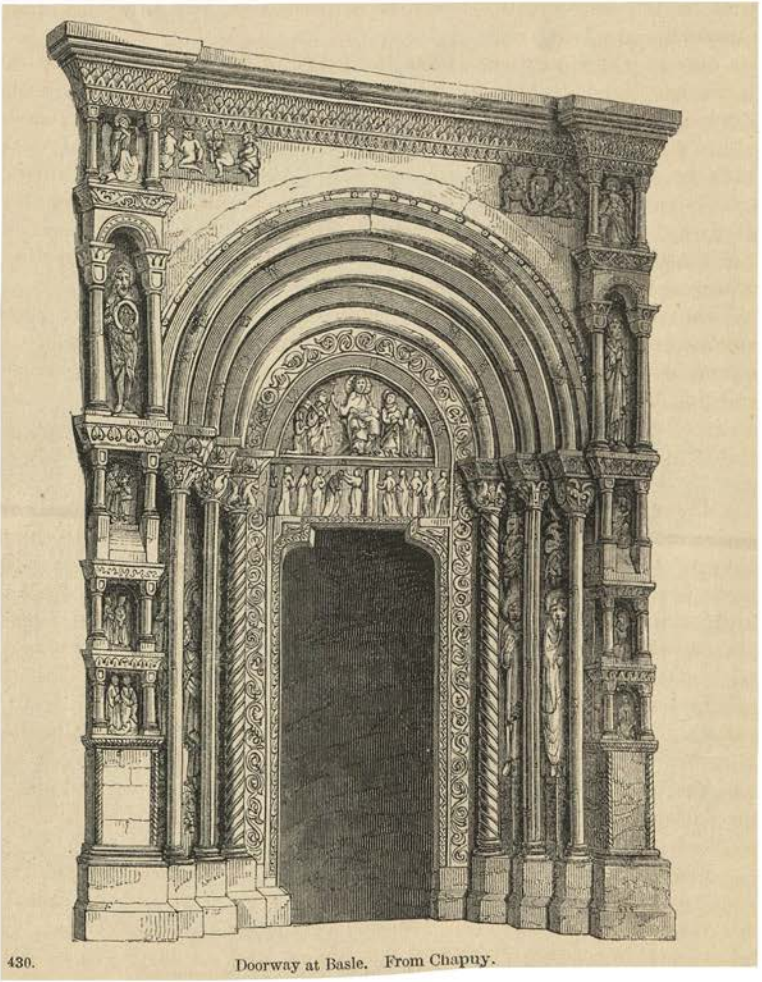


429. Cloister at Zurich. From Chapuy, Moyen Age Monumental.

unusual in Switzerland, though nearly unknown in the Gothic churches of Italy and Germany. The lateral chapels have apses, especially the southern one, which I believe to be either the oldest part of the cathedral, or built at least on the foundations of that of Otho the Great.

The most beautiful and interesting parts of this church are the northern doorway and the cloisters, both of nearly the same age, their date certainly extending some way at least into the 12th century. As specimens of the sculpture of their age, they are almost unrivalled, and strike even the traveller coming from Italy as superior to any of the contemporary sculpture of that country.

The cloister is nearly square, from 60 to 70 ft. each way. Every side is divided into five bays by piers supporting bold semicircular arches, and these are again subdivided into three smaller arches



430. Doorway at Basle. From Chapuy.

supported by two slender pillars. The arrangement will be understood by the woodcut (No. 429). This cloister is not superior, in design to many in France and elsewhere of the same age. Its beauty consists in the details of the capitals and string-courses, which are all different, most of them with figures singularly well executed, but many merely with conventional foliage, not unlike the honeysuckle of the Greeks, and not unworthy of the comparison as far as the mere design is concerned, though the execution is rude. The same is true of the sculptures of the portal; though they display even less classical feeling, they show an exuberance of fancy and a boldness of handling which we miss entirely in the succeeding ages, when the art yielded to make way for mere architectural mouldings, as if the two could not exist together. The example of Greece forbids us to believe that such is necessarily the case; but in the middle ages it certainly is found that as the one advanced nearer to perfection, the other declined in almost an equal degree.

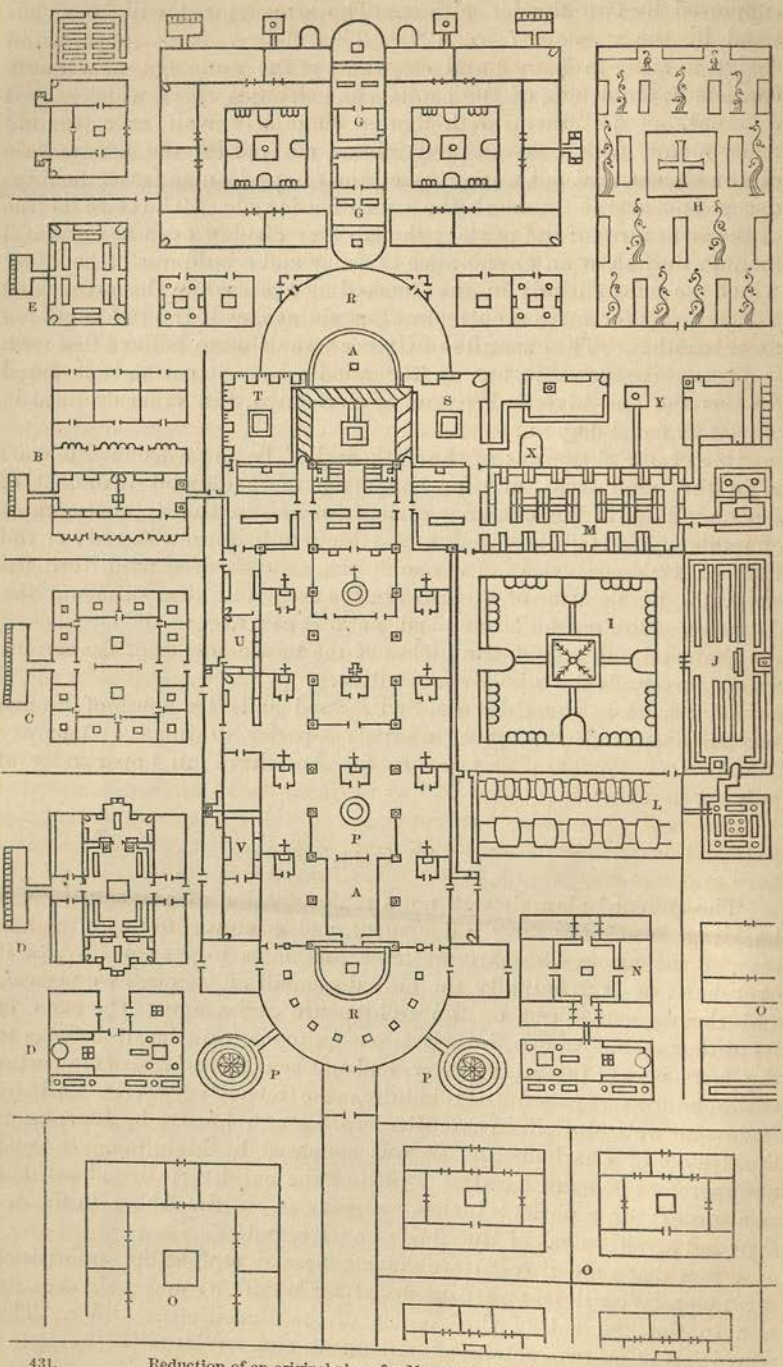
One of the doorways of the Cathedral of Basle (woodcut No. 430) is in the same style, and perhaps even more elegant than that of Zurich. Both in the elegance of its form and in the appropriateness of its details it is quite equal to anything to be found in Italy of the 11th or 12th centuries. Its one defect, as compared with Northern examples, is the want of richness in the archivolts that surmount the doorway. But, on the other hand, nothing can exceed the elegance of the shafts on either side, the niches of the buttresses, or of the cornice which surrounds the whole composition.

In respect to these details, Switzerland and the south of France surpass even Italy, and are infinitely superior to the contemporary examples of Northern Europe, as we shall have an opportunity of judging hereafter.

ST. GALL.

The annexed plan, though not a representation of any actual Swiss building, is so interesting a document, and so connected with the history of the art in Germany at least, that it is impossible to pass it over here, as it is actually the only document of its class we possess, and throws great light on the architecture of its age. The name of its author is not known, but it seems quite certain that it belongs to the early part of the 9th century, and was sent to the Abbot Gospertus while he was engaged in rebuilding the monastery of St. Gall, by some one well skilled in architecture, though hardly by Eigenhard, the friend of Charlemagne, as was supposed by Mabillon. It must not therefore be considered as a plan of the buildings carried out, but as a project for a perfect monastery, sent to aid the Abbot in the design and arrangement of the abbey he governed.

From that time it seems to have remained among the archives of the monastery till it was discovered by Mabillon, and published by him in the 2nd vol. of the Annals of the Benedictine Order. The plan itself is on two sheets of parchment, and so large (3½ by 4½ ft.)



431. Reduction of an original plan of a Monastery found at St. Gall.

that only a small portion of it can be produced here, and that on a reduced scale.

The whole group of buildings was apparently meant to occupy a space of about 450 ft. by 300. On the north side of the church (A A) was situated the abbot's lodging (B), with a covered way into the church, and an arcade on each face; his kitchen and offices were detached, and situated to the eastward. To the westward of this was the public school (C), and still farther in that direction the hospitium or guest-house (D), with accommodation for the horses and servants of strangers attached to it.

Beyond the abbot's house to the eastward was the dispensary (E), and beyond that again the residence of the doctor (F), with his garden for medical herbs and simples at the extreme corner of the monastery.

To the eastward of the great church was situated another small double apse church (G G), divided into two by a wall across the centre.

On either side of this church was a cloister, surrounded by apartments: that on the north was the infirmary, next to the doctor's residence, and to it the western portion of the chapel was attached. The other was the school and residence of the novices. Beyond these was the orchard (H), which was also the cemetery of the monks; and still farther to the southward were situated the kitchen-garden, the poultry-yard, the granaries, mills, bakehouses, and other offices. These last are not shown in the woodcut for want of space.

On the south side of the church was situated the great cloister (I). On the south side of this was the refectory (J), with a detached kitchen (K), which also opened into the great wine-cellar (L); opposite to this was the dormitory (M), with various dependent buildings.

To the westward of this was another hospitium (N), apparently for an inferior class of guests; and to the southward and westward (O O) were placed the stables for horses, cattle, sheep, and all the animals required for so large an establishment, and all arranged with as much skill and care as could be found in the best modern farms.

The principal point of interest is the church, which was designed to be 200 ft. long from east to west, and about 40 ft. in width, divided into three aisles by two rows of columns. It has two apses; the principal one towards the east has a vaulted crypt, in which is a confessio, meant to contain the relics of the patron saint, St. Gall. In front of this is a choir, arranged very much on the model of that of S. Clemente at Rome, before described.[1] The western apse, on the same level as the floor of the church, was to be dedicated to St. Paul, the eastern one to St. Peter. Between the two choirs is the font (P) and the altar of St. John the Baptist, and on each side a range of altars dedicated to various saints. Behind both apses are open spaces or paradises (R R) (parvis), that to the west surrounded by an open semicircular porch, by which the public were to gain access to the church; and on either side of this, but detached, are two circular towers, each with an altar on its summit, one dedicated to the archangel Michael, the

[1] See p. 484.

other to Gabriel: these were to be reached by circular stairs or inclined planes. No mention is made of bells, but the text would seem to intimate rather that the towers were designed for watch-towers or observatories. The similarity of their position and form to that of the Irish round towers is most remarkable; but whether this was in compliment to the Irish saint to whom the monastery owed its origin, or whether we must look to Ravenna for the type, are questions not now easily determined. We know far too little yet of the archæology of the age to speak with certainty on any such questions. There can, however, I think, be little doubt but that the meaning and origin of these and of the Irish towers were the same; but whether it was a form exclusively belonging to a Celtic or Irish race, or common to all churches of that age, is what we cannot now decide from the imperfect data at our command.

On either side of the east end of the church is an apartment, where the transept is usually found: that on the south is the vestry (s); on the north is the library (t), and attached to the church on the same side is the schoolmaster's house (u), and beyond that the porter's (v). All the living apartments have stoves in the angles. But the dormitory has a most scientific arrangement for heating: the furnace is at (x), and the smoke is conveyed away by a detached shaft at (y); between these two there must have been an arrangement of flues under the floor for heating the sleeping apartment of the monks.

Were it not that the evidence is so incontrovertible, we should feel little inclined to fancy that the monasteries of this dark age showed such refinement and such completeness as is here evidenced; for at no period of their history can anything more perfect be found. In the church especially, the two apses, the number of altars, the crypt and its accompaniments, the sacristy, the library, &c., many of which things have generally been considered as the invention of subsequent ages, are marked out distinctly and clearly, as well understood and usual arrangements of ecclesiastical edifices. This fact refutes at once all the arguments as to the dates of churches which have been founded on the supposed era of the introduction of these accessories.

CHAPTER III.

GERMANY.

CONTENTS.

Historical notice — Circular churches — Aix-la-Chapelle — Nimeguen — Bonn.

DURING the whole of the period that elapsed between the retirement of the Romans and the reign of Charlemagne, Germany seems to have been in such a state of anarchy and confusion, that no great buildings were or could be undertaken. At all events, no trace of any edifice of this age remains, nor even a tolerably distinct tradition of any one being founded by the unsettled barbarian tribes who occupied that fine country when deprived of the protection of the empire of Rome.

This long period of darkness was terminated by the reign of Charlemagne. He restored the authority of the laws and encouraged the arts of peace, and founded many noble edifices, which either in whole or in part remain to the present day. This gleam of tranquil brightness, however, seems to have been more owing to the individual greatness of the man than to the ripeness of the people for more civilised institutions; for again, on his death, they relapsed into confusion and barbarity. From this state the land partially emerged under the first three Othos, in whose reigns church building seems to have been renewed with some energy. From the beginning of the 11th to the end of the 12th century the progress was great and uninterrupted, and the style then in vogue was brought to its greatest degree of perfection. But after the first twenty years of the 13th century the Germans began to tire of their own national style, and to copy the then fashionable French style. Before the death of Frederick II., in whose reign the change commenced, the great German Round Gothic style, before it had reached the full maturity of perfection, had given way to the French Pointed Gothic, and perished, never to revive.

There is none perhaps of the mediæval styles so complete within itself, and so easily traced, as the round-arched German-Gothic.

We have already, in a preceding chapter, attempted to trace the history of one—perhaps the elder branch of it—as it existed in the valley of the Po. It may there have arisen with the Goths of the 6th century, and was certainly practised by the Lombards before their overthrow by Charlemagne, though, as before pointed out, we have hardly any authentic specimen, except the Swiss examples, now remaining to show what it really was before the beginning of the 11th century. It is then, however, so complete and so essentially different from the Romanesque, that we can almost certainly discern

the steps by which this point was reached from the internal evidence afforded by the buildings themselves.

During the 11th and 12th centuries the valley of the Po was virtually a part of the great German empire, and its style of architecture was consequently similar to, if not nearly identical with, that found in the valley of the Rhine. In the 13th century, as German influence died out, this style in Italy gave way, partly to an importation of the French pointed style, but more to a mixed style, partly French, partly German, and in a still greater degree made up of a native indigenous element which it is difficult to describe or define.

On the banks of the Rhine the history of the art is very similar to this, except that it begins absolutely with Charlemagne, one only building having the least title to the character of Romanesque—the well-known porch of the convent at Lorsch. This is generally stated to have been built in the year 774; but it is so classical in all its details, so like what we can fancy the Roman style to have become in Germany a century or two earlier, that it seems rather the remains of some earlier buildings that stood on this spot before the monarchy was founded by Pepin in the year 764. At all events, if this is not so, it will be necessary to bring down the date of the celebrated cathedral at Aix-la-Chapelle, as at present existing, to the time when it is known to have been extensively repaired at least, by Otho III.; for it shows no trace of that classicality which is so distinguishing a feature of the other, and therefore must have been later.

432. Porch of Convent at Lorsch.

Leaving this for the present, we have certainly one great circular church built by Charlemagne at Aix-la-Chapelle, and another at Nimeguen. There is a third very similar at Ottmarsheim in Alsace, though a century at least more modern. Otho the Great built himself a circular tomb-house at Magdeburg, within whose walls he and the English Edith, his wife, were buried. Another circular church of the same age was built at Fulda, and one still exists in ruins on the Petersberg near Halle. Indeed, both from analogy and from historical evidence, we seem justified in assuming that almost all the churches of this date were circular.

The oldest buildings of the basilican form are said to have been the

cathedrals of Cologne and Fulda, but the evidence, at least for the former, is very indistinct and imperfect. At the end, however, of the 10th and beginning of the 11th centuries several large and important churches of this class were erected in various parts of Germany, such as that at Gernrode (960), Hildesheim (1001), Limburg on the Haardt (1035). The reconstruction of the cathedral at Trèves was undertaken, and that of several important churches in Cologne, and from this period we advance steadily through a complete series of edifices, to which the cathedrals of Mayence, Worms, and Spires belong, through the whole of the 12th and the first quarter of the 13th centuries, without any trace of a change in style. The old circular cathedral at Magdeburg was burnt down in 1208. Shortly afterwards its rebuilding was commenced in a clumsy transitional pointed style. The church of the Holy Virgin at Trèves is said to have been commenced as early as 1227, though it seems to have been but slightly advanced in 1243. The first complete specimen of the pointed style whose date is well ascertained is the church at Marburg, commenced in the year 1235, and finished in 1283.

These buildings will all be more particularly mentioned in the sequel. In the meanwhile, however, it is essential to define the age and locality of this style, which at the period of its greatest development, in the 12th century, extended through eight degrees of latitude, from the sources of the Po to the mouths of the Rhine, with singularly little variation in local difference of form. It is true, indeed, that there is a greater degree of perfection in the sculpture and of elegance in the details of the Italian examples; but there is a grandeur in the conception and the scale of the Rhenish edifices that throws into the shade the smaller buildings in the valley of the Po.

In Germany the duration of the style somewhat exceeds two centuries and a half, from the time of the great Otho to that of Frederic II. During the whole of that time the Germans laboured assiduously in perfecting their national architecture, and with very considerable success as we shall presently see. In the 13th century the same thing happened as afterwards occurred in the 17th, when Germany abandoned her own literature and almost her own language to adopt a slavish imitation of the French school of the day, in which she persevered till the troubles of the last hundred years roused her from her lethargy to vindicate her slumbering nationality. So in the 13th century she abandoned her own national round-arched Gothic to adopt the French pointed style, and persevered, without either understanding it or being able to naturalise it, till the Reformation awakened her to a sense of her own importance and her proper mission in the intellectual world.

By a strange perversion of historical evidence, the Germans have attempted of late years to appropriate to themselves the credit of the invention of the pointed style, calling it in consequence German architecture. The fact is that the pointed style was not only invented but perfected in France long before the Germans thought of introducing it; and when they adopted it, they did so without understanding it, and fell far short of the perfection to which it was carried by the

French in all their edifices in the age of its greatest development in that country.

On the other hand, the Germans may fairly lay claim to the invention of the particular style which prevailed throughout Lombardy and Germany of which we are now speaking. This style, it is true, never was fully developed, and never reached that perfection of finish and completeness which the pointed style attained. Notwithstanding this, I feel convinced that it contained nobler elements than the other, and was capable of far more successful cultivation. Had its simpler form and grander dimensions been elaborated with the same care and taste, Europe would have possessed a higher style of mediæval architecture than she ever saw. The task, however, was abandoned before it was half completed, and it is only too probable now that it can never be resumed.

A complete history of this style, worthy of its importance, is still a desideratum which it is to be hoped the zeal and industry of German architects will ere long supply, and vindicate their national art from the neglect it now lies under, by illustrating as it deserves one of the most interesting chapters in the history of architecture.[1] Already German writers seem to be aware that the age of the Hohenstaufens was not only the most exclusively national, but also the most brilliant period of their history. Its annals have engaged the pens of their best historians. Its poetry has been rescued from obscurity and commented upon with characteristic fulness. Every phase of their civilisation has been illustrated fully, except one—that one being their architecture, the noblest and the most living record of what they did or aspired to, that could be left for their posterity to study. So distinctly is it their own, that, were it necessary to find for it a separate name, the style of the Hohenstaufens would be that which most correctly describes it.

The complete description of this style must be left to works in which the subject can be treated more fully than is possible here. All we can hope to do is to define it so as to separate it clearly from other styles, and to point out its more important and characteristic features. The first will not be difficult, as it has singularly little affinity with any of the contemporary styles except the Burgundian; and perhaps even Burgundy ought to be considered a province of Germany rather than of France in the age to which we refer. At all events, there is sufficient affinity between the people to account for this similarity. The Norman and other styles of France differ so essentially as to be easily distinguished one from the other.

The leading characteristics of the German style are the double apsidal arrangement of plan, the multiplication of small circular or octangular towers, combined with polygonal domes, at the intersections

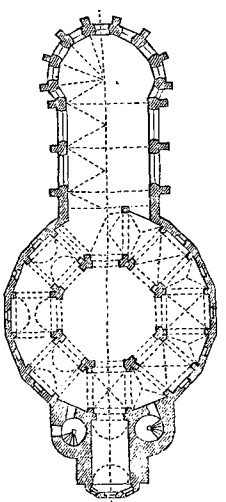
[1] The work of F. Osten on the architecture of Lombardy, and that of Geier and Görz on the style in the Rhine country, combined with the works of Boisserée, have already furnished considerable materials for such a history. Both these first-named works were left incomplete, the former from the death of the author, the latter owing to the late troubles of the country.

of the transepts with the nave, and the extended use of galleries under the eaves of the roofs both of the apses and of the straight sides.' The most ornamental parts are the doorways and the capitals of the columns. The latter surpass in beauty and in richness anything of their kind executed during the middle ages, and, though sometimes rude in execution, equal in design any capitals ever invented. They only wanted the experience and refinement of another century of labour to enable them successfully to compete with any part of the pointed architecture which succeeded them.

The intruding style excelled the old German art only by being complete and perfect in itself.

AIX-LA-CHAPELLE.

The Dom at Aix-la-Chapelle must rank among unedited monuments, though it is, without a single exception, the most important building of its class in Europe. It is the oldest authentic example we have of its style. It was built by the greatest man of his age, and more emperors have been crowned and more important events happened beneath its venerable vaults than have been witnessed within the walls of any existing church in Christendom.[1] Notwithstanding the doubts that have been thrown lately on the fact, I feel convinced that we now possess the church of Charlemagne in all essential respects as he left it. The great difficulty in fixing its age appears to arise from the fact of most of its architectural ornaments having been painted or executed in mosaic, instead of being carved as in the porch at Lorsch, and time and whitewash have so obliterated these, that the remaining carcase—it is little else—seems ruder and clumsier than we should expect.



433. Plan of the Church at Aix-la-Chapelle. From J. von Nolten. Scale 100 ft. to 1 in.

As will be seen from the annexed plan, the church is externally a polygon of 16 sides, and about 105 ft. in diameter; internally 8 compound piers support a dome 47 ft. 6 in. in diameter. The height is almost exactly equal to the external diameter of the building. Internally this height is divided into 4 stories. The two lower, running over the side aisles, are covered with bold intersecting vaults. The third gallery, like the triforium of more modern churches, is open to the roof, and above that are 8 windows giving light to the central dome.

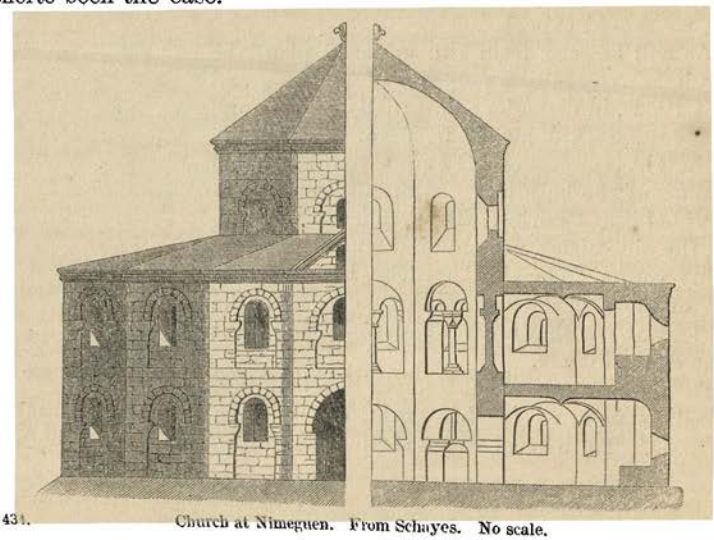
To the west was a bold tower-like building, flanked, as is usual in this style, by two circular towers containing staircases. To the east was a semicircular niche containing the altar,

[1] I have myself examined this edifice, but in far too hurried a manner to enable me to supply the deficiency. I speak, therefore, on the subject with diffidence.

which was removed in 1353, when the present choir was built to replace it.

As before mentioned, there is a tradition that Otho III. rebuilt this minster. It is more probable that he built for himself a tomb-house behind the altar of that of his illustrious predecessor, where his bones were laid, and where his tomb till lately stood at the spot marked X in the centre of the new choir. What the architect did in the 14th century was to throw the two buildings into one, retaining the outline of Otho's tomb-house, which may still be detected in the unusual form of the plan of the new building.

The tradition is that this building is a copy of the church of St. Vitale at Ravenna, and on comparing its plan with that represented in woodcut No. 392, it must be admitted that there is a considerable resemblance. But there is a bold originality in the German edifice, and a purpose in its design, that would lead us rather to consider it as one of a long series of similar buildings which there is every reason to believe existed in Germany in that age. At the same time the design of this one was no doubt considerably influenced by the knowledge of the Italian examples of its class which its builders had acquired at Rome and Ravenna. Its being designed by its founder for his tomb is quite sufficient to account for its circular plan—that, as has been frequently remarked, being the form always adopted for this purpose. It may be considered to have been also a baptistery—the coronation of kings in those days being regarded as a re-baptism on the entrance of the king upon a new sphere of life. It was in fact a ceremonial church, as distinct in its uses as in its form from the basilica, which in Italy usually accompanied the circular church; but whether it did so or not in this instance can only be ascertained when the spot and its annals are far more carefully examined than has hitherto been the case.

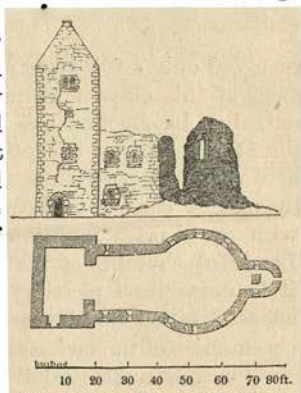


431. Church at Nimeguen. From Schayes. No scale.

The church at Nimeguen is even less known than this one; we have no tradition as to who its builder was, nor whose tomb it was erected to contain. From the half-section, half-elevation (woodcut No. 434[1]), it will be seen that it is extremely similar to the one just described, both in plan and elevation, but evidently of a somewhat more modern date, having scarcely a trace of the Romanesque style. It wants too the façade which usually adorned churches of that age; but it seems so unaltered from its original arrangement that it is well worthy of more attention than it has hitherto received.

Of the church of Otho the Great at Magdeburg we know nothing but from a model in stone, about 12 ft. in diameter, still existing in the present cathedral, and containing sitting statues of Otho and Edith, who were buried in the original edifice. The model unfortunately was made in the 13th century, when the original was burnt down; and as the artists in that day were singularly bad copyists, we cannot depend much on the resemblance. It appears, however, to have been a polygon of 16 sides externally, like the two just mentioned; and if I am correct in supposing, as was generally the case, that the choir of the present cathedral is built on the foundation of the older church, its dimensions must have been nearly similar, or only slightly inferior to those of either of the two last mentioned churches. The details of the model belong to the age in which it was made, not that of the church it was meant to represent.

The church at Ottmarsheim is still unedited; that at the Petersberg, shown in the woodcut No. 435, is a ruin, but interesting as showing either an older form of circular church than those described above, or at all events one more essentially German, and less influenced by classical and Romanesque forms than they were. It never was or could have been vaulted, and it possesses that singular flat tower-like frontispiece which is so characteristic of the German style, but found in no other country, and whose origin is still unknown.



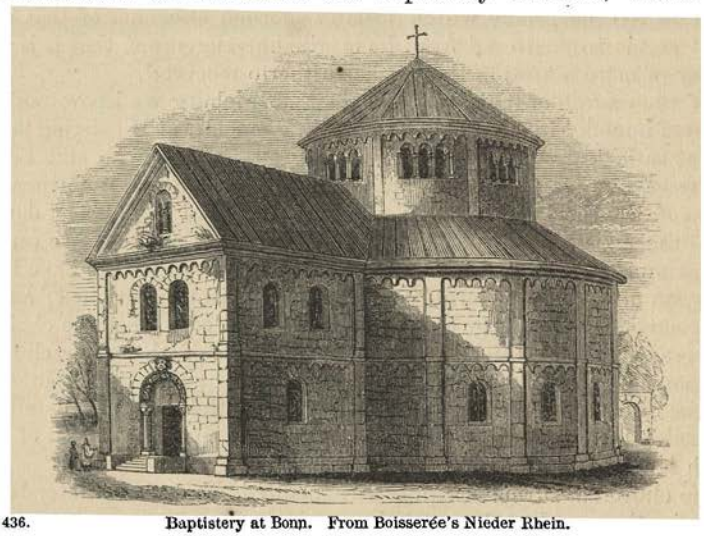
435. Church at Petersberg. From Puttrich.

Though it is anticipating to some extent the order of the dates of the buildings of Germany, it may be as well to complete here the subject of the circular churches of that country; for after the beginning of the 11th century they ceased to be used except in rare and isolated instances. At that date all the barbarian tribes had been converted, and the baptism of infants was a far less important ceremony than the admission of adults to the bosom of the Church, and one not requiring a separate edifice for its celebration. At the same time the immense increase of the ecclesiastical orders, and the liturgical forms

[1] Taken from Schayes' Histoire de l'Architecture en Belgique, vol. ii. p. 18, taken by him, I believe, from Lassaultx.

then established, rendered the circular form of church inconvenient and inapplicable to the wants of the age. The basilica, on the other hand, was equally sacred with the baptistery, and soon came to be considered equally applicable to the entombment of emperors and other similar purposes.

The circular church called the Baptistery at Bonn, which was



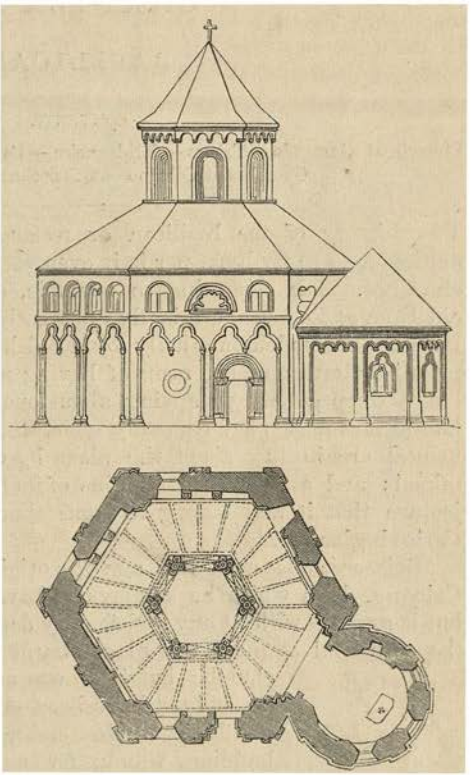
436. Baptistery at Bonn. From Boisserée's Nieder Rhein.

removed only a few years ago, was one of the most interesting specimens of this class of monuments in the age to which it belongs. No record of its erection has been preserved, but its style is evidently of the 11th century. Excepting that the straight or rectangular part is here used as a porch, instead of being inserted between the apse and the round church, to form a choir, the building is almost identical with St. Tomaso in Limine (woodcuts Nos. 423 and 424) and other Lombard churches of the same age. Both externally and internally it is certainly a pleasing and elegant form of church, though little adapted either for the accommodation of a large congregation or the ceremonies of the mediæval church.

There is another small edifice called a Baptistery at Ratisbon, built in the last years of the 12th century, which shows this form passing rapidly away, and changing into the rectangular. It is in reality a square surrounded by 3 apses, and surmounted by an octagonal dome. As we shall presently see, the same arrangement forms the principal as well as the most pleasing characteristic of the Cologne churches, where on a larger scale it shows capabilities which we cannot but regret were never carried to their legitimate termination. The present is a singularly pleasing specimen of the class, though very small, and wanting the nave, the addition of which gives such value to the triapsal form at Cologne, and shows how gracefully its lines inevitably group together. On the spot it is still called the Baptistery; but the correct

tradition, I believe, is that it was built for the tomb-house of the bishop to whom it owes its erection.

One more specimen will serve to illustrate nearly all the known forms of this class. It is a little chapel at Cobern on the Moselle (woodcut No. 437), hexagonal in plan, with an apse, placed most unsymmetrically with reference to the entrance—so at least we should consider it: but the Germans seem always to have been of opinion that a side entrance was preferable to one opposite the principal point of interest. The details of this chapel are remarkably elegant, and its external form is a very favourable specimen of the German style just before it was superseded in the beginning of the 13th century by the French pointed style.



437. Chapel at Cobern on the Moselle. From Wiebeking. No scale.

There are besides these a circular chapel of uncertain date at Altenfurt near Nuremberg, and the interesting but little known church of St. Michael at Fulda, dedicated in the year 1092, erected to replace an older building whose crypt still remains beneath. According to Kugler it was a sepulchral church, erected in imitation of that at Jerusalem. There are also many others at Prague and in various parts of Germany, but none remarkable either for their historical or for their artistic importance. This form went out of use before the style we are describing reached its acme; and it had not therefore a fair chance of receiving that elaboration which was necessary for the development of its capabilities.

CHAPTER IV.

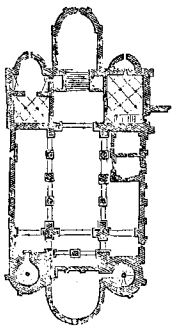
BASILICAS.

CONTENTS.

Church at Gernrode — Trèves — Hildesheim — Cathedrals of Worms and Spires — Churches at Cologne — Other churches and chapels.

The history of the basilican or rectangular churches of Germany neither goes so far back, nor is it even so clear, as that of the round churches. The oldest known example, so far as I am aware, is the old Dom at Ratisbon, originally apparently about 40 ft. by 20 over all. It was surrounded internally by 11 niches and vaulted, showing the peculiar German arrangement of having no entrance at the west end, but a deep gallery occupying about one-fourth of the church. The lateral entrance is unfortunately gone, so that there is very little ornamental architecture about the place by which its age could be determined; and as no record remains of its foundation, we can only conjecture that it may belong to some time slightly subsequent to the Carlovingian era.[1]

Boisserée places in this age the original cathedrals of Fulda and Cologne, both which he assumes to have been double apse basilicas, but it appears without any satisfactory data. There is no doubt that the cathedral at the latter place, burnt in 1248, was a double apse church; but if it was anything like his restoration it could not have been erected earlier than the 11th or 12th centuries, and must have replaced an older building, which, for anything we know, may have been circular, as probably as rectangular; and such appears also to have been the case at Fulda, though there is even less to go on there than at Cologne.



438. Plan of the Church at Gernrode. From Puttrich.[2]

Leaving these somewhat apocryphal examples, we must come down to the end of the 10th or beginning of the 11th century for examples of the class we are now speaking of. Of these, one of the most perfect and interesting is the church at Gernrode, in the Hartz, founded A.D. 960, when probably the eastern part (not the extended choir) was commenced, and the whole building may be taken to have been built within a century after that date. From the plan (woodcut No. 438), it will be seen how singularly like it is to the design for a

[1] At Aquileja, at the upper end of the Adriatic Gulf, Popo, the archbishop, between the years 1019–1042, erected a building almost identical with this in every respect between the old basilica and the baptistery, so as to make a double apse church out of the old Romanesque arrangement. The similarity of the two buildings must probably bring down the date of that at Ratisbon to the 10th century.

[2] Baukunst des Mittelalters in Sachsen.

church found in the monastery of St. Gall,[1] except that it appears to have been originally about 50 ft., or one-fourth less in length. The western circular towers, instead of being detached, are now joined to the building. Piers too are introduced internally, alternating with pillars; and altogether the church shows just such an advance on the St. Gall plan as we might expect a century or so to produce, but showing most satisfactorily what the original form of these churches really was.

439. View of West-end of Church at Gernrode. From Puttrich.

It possesses what is rare in this country—a bold triforium gallery, and externally that strange gallery connecting the two towers which forms so distinguishing a characteristic of German churches. A still bolder example of this gallery remains in the façade of the once famous abbey of Corvey, on the eastern frontier of Westphalia (woodcut No. 440), where we find the feature developed to its fullest extent, so that it must originally have entirely hidden the church placed behind it.

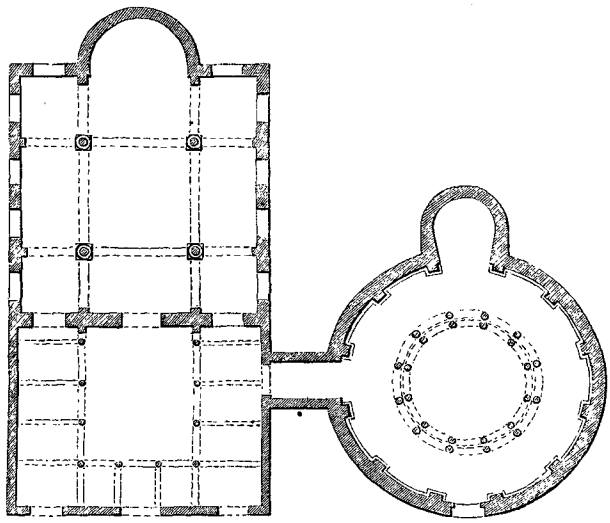
440. View of West-end of Abbey of Corvey.

To return, however, to Gernrode; as may be seen from pillars without anything like vaulting shafts being used to divide the nave from the aisles, it was originally intended to have a flat

[1] See p. 556.

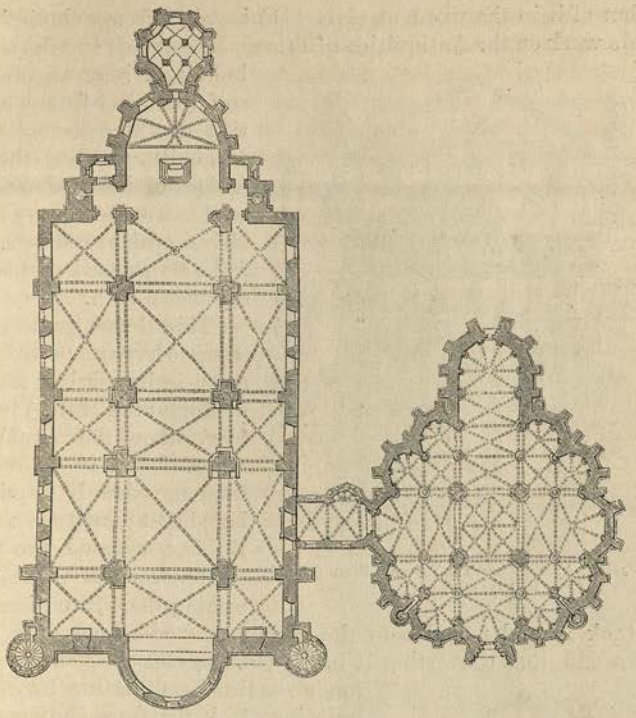
wooden ceiling, as it has at present. Indeed, this seems to have been most generally the case with the German basilicas of this age; their architects did not then feel themselves equal to vaulting the large spaces, or at least when they did so, used piers of such enormous strength as to show beyond a doubt for what purpose they were intended. It does not appear that, strictly speaking, either form was earlier than the other; but it certainly is the case that in the 11th century the flat ceiling was more generally used than the other, though by no means exclusively, nor can we assert that a wooden-roofed church was of necessity earlier than one that was vaulted. Of this we shall have occasion to speak again hereafter.

If the church at Gernrode is a satisfactory specimen of a complete German design carried out in its integrity, the cathedral at Trèves is both more interesting as well as instructive from a very different cause, inasmuch as it is one of those aggregated buildings of all ages and styles which let us into the secrets of the art, and contain a whole history within themselves; and as the dates of the successive eras can be ascertained with very tolerable accuracy, it may be as well to describe it next in the series, to explain how and where the various changes took place.

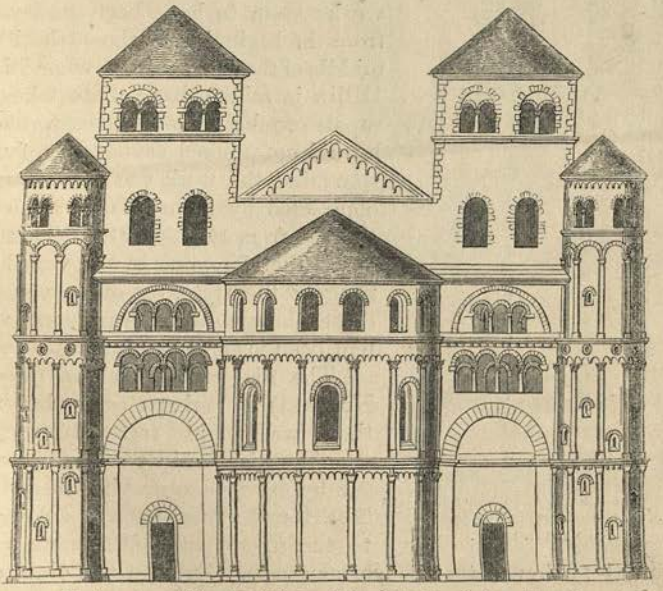


441. Plan of original Church at Trèves. Scale 100 ft. to 1 in.

As is well known, the original cathedral at Trèves was built by the pious Helena, mother of Constantine, and seems, like the contemporary church at Jerusalem, to have consisted of two distinct edifices, one rectangular, the other circular. The original circular building was pulled down in the 13th century, as before mentioned, to make way for the present church of St. Mary, erected on its site, and with, I believe, the same dimensions. Of the other, or square building, enough still remains encased in the walls of the present basilica to enable us to determine its size and plan with very tolerable accuracy.

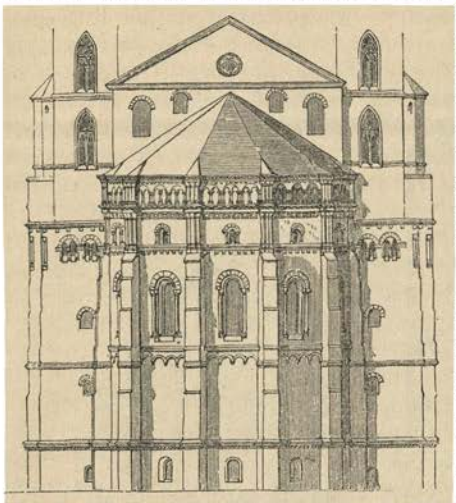


442. Plan of Mediæval Church at Trèves. From Schmidt, Baudenkmale von Triers. Scale 100 ft. to 1 in.



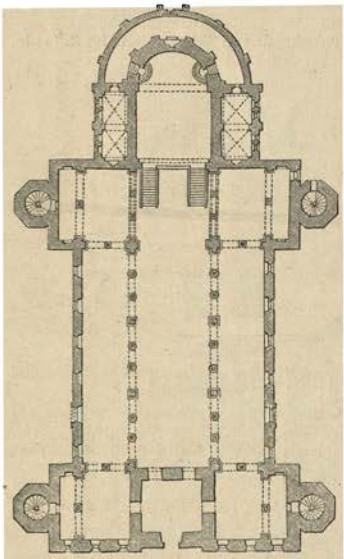
443. Western Apse of Church at Trèves. From Schmidt. Scale 50 ft. to 1 in.

The plan of it in the woodcut (No. 441) is taken from Schmidt's most valuable work on the Antiquities of Trèves. The atrium and the circular building I have restored myself, the latter from a conviction that the present edifice was built nearly on the foundations of its predecessor, as well as from examples quoted above, of the same age. The former was an indispensable adjunct to both.



444. Eastern Apse of Church at Trèves. From Schmidt. Scale 50 ft. to 1 in.

This Romanesque church seems to have remained pretty much in its original state till the beginning of the 11th century, when the Archbishop Poppo found it so ruinous from age, that it required to be almost entirely rebuilt. He first encased the pillars of the Romans in masonry, making them into piers. He then took in and roofed over the atrium, and added an apse at the western end, thus converting it into a German church of the approved model, so that from this time forward the buildings took the form shown in the woodcut No. 442. No very important works seem to have been undertaken from the beginning of the 11th till the middle of the 12th century, when Bishop Hillin is said to have undertaken the repair or rebuilding of the eastern apse: he did not proceed beyond the foundation; but the work was taken up and completed by Bishop John, who held the see from 1190 to 1212. These two apses, therefore, one at the very beginning of the style, the other as near its close, show clearly the progress which had been made in the interval.



445. Plan of Church at Hildesheim. From Möller, continued by Gladbach. Scale 100 ft. to 1 in.

The first of these apses (woodcut No. 443) is perhaps somewhat ruder than we might reasonably expect, though this may in part be accounted for by its remote provincial situation. The round towers too are subordinate to the square ones, in a manner more congenial to French than to German taste. But the principal defect is in the apsidal gallery, which is rude and tasteless as compared with

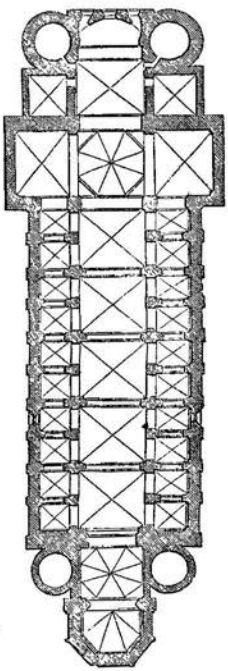
other specimens, which we are apparently justified in considering as contemporary. Before the later or eastern apse was erected, the gallery had almost run into the opposite extreme of minute littleness, and the polygonal form and projecting buttresses of the pointed style were beginning to supersede the simpler outlines of the parent style, of which these two specimens form as it were the Alpha and the Omega. Between them the examples and varieties are so numerous, that there really is an "*embarras de richesse*" in selecting those most appropriate for illustration. The church at Hildesheim, erected by Bishop Bernward in the first years of the 11th century, is among the earliest and most interesting of those remaining in sufficient purity to enable us to judge correctly of their original appearance. The plan (woodcut No. 445) is simple,—first a western transept or façade, a nave little longer than it is broad, terminated by another transept similar to the first, flanked like it by two octagonal towers; beyond this a short choir and simple apse, with a low aisle surrounding it, but not communicating directly with the church. The entrances are as usual on each side of the nave, and none at the west end. Though the proportions appear short with reference to the breadth, considerable additional effect is given by the screens that shut off the transept so as not to allow the perspective effect to be broken. Hence the continuous view of the central aisle, being six times as long as it is broad, gives the appearance of far greater length to the church than could be supposed possible from its lineal dimensions. But the great beauty here is the elegance both in proportion and detail of the pier arches, which separate the nave from the aisles; the proportion of the pillars is excellent, their capitals rich and beautiful, and every third pillar being replaced by a pier, gives a variety and apparent stability which is extremely pleasing.

446. Internal View of the Church at Hildesheim. From Möller.

The church at Limburg on the Haardt, erected by the Emperor Conrad, A.D. 1035, is a similar but rather larger church than that at Hildesheim, possessing a peculiarity somewhat new in Germany, of a handsome western porch and entrance, and a choir with a square termination, instead of with an apse as was usual.

The three great typical buildings of this epoch are the Rhenish cathedrals of Mayence, Worms, and Spires. The first was commenced in the 10th century, and still possesses parts belonging to that age. The present edifice at Worms belongs principally to the building dedicated there in 1110. The age of the third and most important of these three cathedrals is still a matter of controversy, and one, I fear, that will not easily be settled; for the church has been so frequently damaged by fire and war, and lately by ill-judged restorations, that it is not easy to ascertain what is old and what new. Still I cannot help feeling convinced that the plan certainly, and a great part at least of the present structure, belong to the original building of Conrad, commenced in 1030, and which was dedicated by his grandson, Henry IV., 31 years afterwards.

Except the eastern apse, which is as usual flanked by 2 round towers, the whole of the exterior of Mayence has been so completely rebuilt, that little can now be said about it. The plan presents nothing remarkable, except that it is evident, from its solidity and arrangement, that it was meant from the beginning to be a vaulted building; and of its details only one doorway remains that can certainly be said to belong to the original foundation.[1] It is remarkable principally for the classicality of its details, which almost deserve the title of Romanesque; and if its age is correctly ascertained (the end of the 10th century), it would go far to confirm the date usually assigned to the portal at Lorsch, namely, the late Carlovingian period.[2]



447. Plan of Cathedral of Worms. From Geier and Görz. Scale 100 ft. to 1 in.

448. One Bay of Cathedral at Worms. From Geier and Görz.

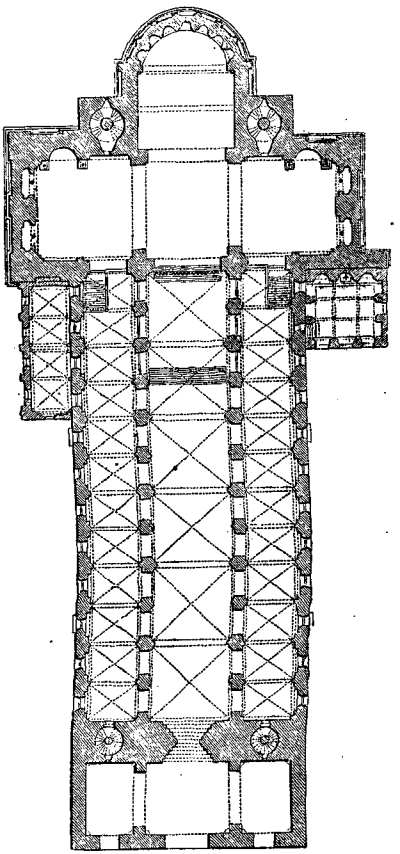
At Worms the only part now remaining, of the edifice dedicated in 1110, is the eastern end. The western apse cannot be older than the year 1200, the intermediate parts having been erected between these dates. The original plan is probably nearly unchanged, and is a fine specimen of its class. The eastern apse is a curious compromise between the two modes of finishing that were in use at that

[1] Möller, Deutsch Baukund, vol. i. plate vi.

[2] The dimensions of this building I have not been able to ascertain with sufficient correctness to quote. I possess four plans, all with great pretensions to accuracy, and with scales attached, but they differ so widely that I do not know which to follow.

period, being square externally, and circular in the interior. The best detail of this church is perhaps the pilaster-like buttresses of the nave (woodcut No. 448), which rise from elegant bases like those of classical pillars, and finish pleasingly with the circular cornice moulding so usual at this period. Internally, the clustered piers and larger windows give it a lightness and completeness which is not found in either of its great rivals.

Although the cathedral of Spires cannot boast of the elegance and finish of that of Worms, it is perhaps, taken as a whole, the finest specimen in Europe of a bold and simple building conceived, if I may so express myself, in a truly Doric spirit. Its general dimensions are 435 ft. in length by 125 in width; and taken with its adjuncts, it covers about 57,000 square feet, so that it is by no means one of the largest cathedrals of its class. It is built so solidly, that the supporting masses occupy nearly a fifth of the area. Like the other great building of Conrad's, the church of Limburg, this one possesses what is so rare in Germany, a narthex or porch, and its principal entrance faces the altar. Its great merit is the daring boldness and simplicity of its nave, which is 45 ft. wide between the piers, and 105 ft. high to the centre of the vault, dimensions never attained in England, though some of the French cathedrals equal or surpass them. There is a simple grandeur about the parts of this building which gives a value to the dimensions unknown in later times, and I question much if there is any mediæval church which impresses the spectator more by its appearance of size than this.

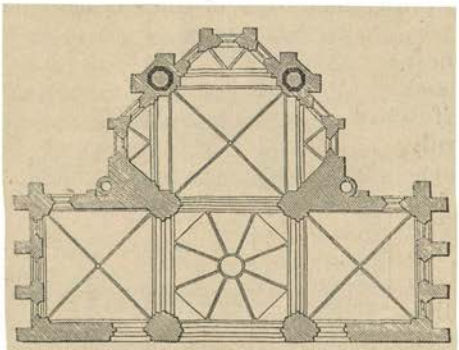


448. Plan of the Cathedral at Spires. From Geier and Görz. Scale 100 ft. to 1 in.

Externally, too, the body of the church has no ornament but its small window openings, and the gallery that runs round under all its roofs. But the bold square towers (certainly of the 12th century) and the central dome group pleasingly together, and, rising so far above the low roofs of the half-depopulated town at its feet, impress the spectator with awe and admiration at the boldness of the design and the grandeur with which it has been carried out. Taken altogether,

this noble building proves that the German architects at that time had actually produced a great and original style, and that they must have succeeded in perfecting it, had they not abandoned their task before it was half completed.

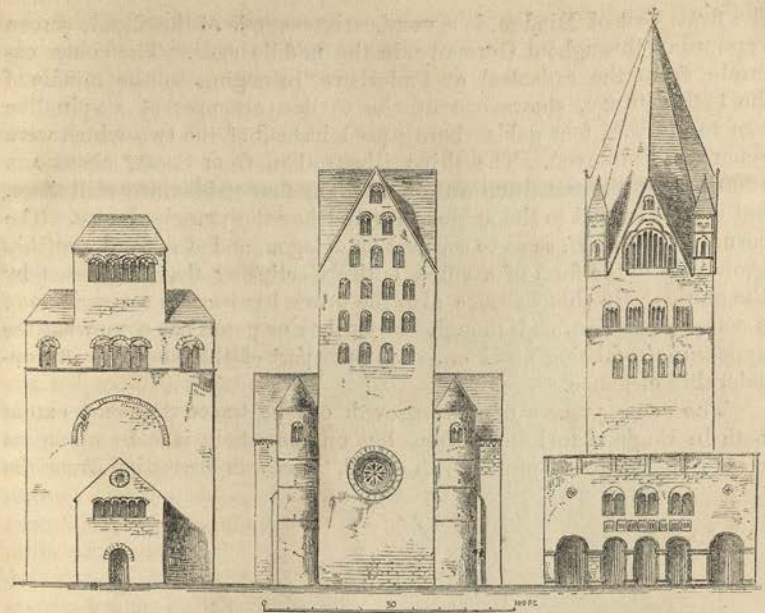
The western apse of the cathedral at Mayence is the most modern part of these three great cathedrals, and perhaps the only example in Germany where a triapsal arrangement has been attempted with polygonal instead of circular forms. In this instance, as shown in woodcut No. 450, the three apses, each formed of three sides of an octagon, are combined together so as to form a singularly spacious and elegant choir, both externally and internally as beautiful as anything of its kind in Germany. Its style is so nearly identical with that of the eastern apse of the cathedral at Trèves (woodcut No. 444), that there can be no doubt but that, like it, it belongs to the beginning of the 13th century, when more variety and angularity were coming into use, suggested no doubt by the greater convenience which flat surfaces presented for inserting larger windows over the older carved outlines. Now that painted glass had come generally into use, large openings had become indispensable for its display. Notwithstanding this advantage, and the great beauty of the other forms often adopted, none of them compensate for the loss of the circular lines of the older buildings.



450. Western Apse of Cathedral at Mayence.

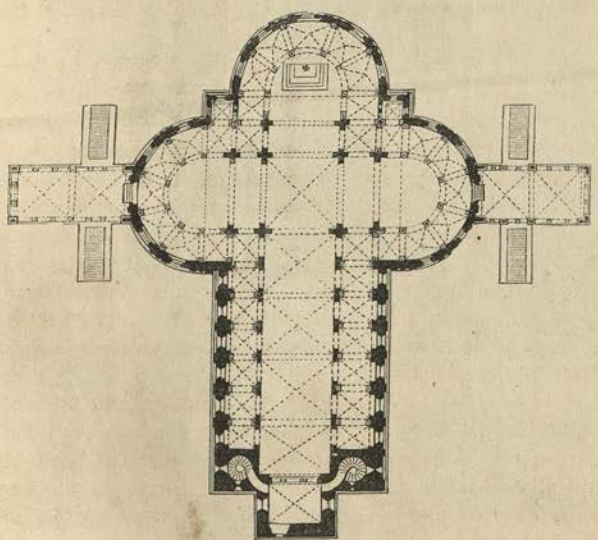
As a general rule, it may be asserted the churches of Westphalia are singularly devoid of taste and good design. They are extremely numerous, and many of them sufficiently large for architectural effect; but in the earlier or Round Gothic period they betray a clumsiness which is very unpleasing, and in the age of the Pointed Gothic their style is wire-drawn and attenuated to a degree almost worse than the heaviness of that which preceded it. The fact, indeed, is only too apparent, that the northern Germans were not an artistic people, for neither in Westphalia nor in any of the countries between it and the Baltic do we find any churches displaying that beauty of style or constructive appropriateness which characterises those of Cologne or the cities to the southward of that town.

A good deal of the heaviness of the northern churches internally may no doubt be traced to the circumstance that the earlier examples depended almost wholly on colour for their ornament, and the painting having disappeared, the plain stone or plaster surfaces remain, their flatness being made only the more prominent by the whitewash that now covers them. Notwithstanding these defects, so many of



451. From Mittelalterliche Kunst in Westfalen von W. Lütke.

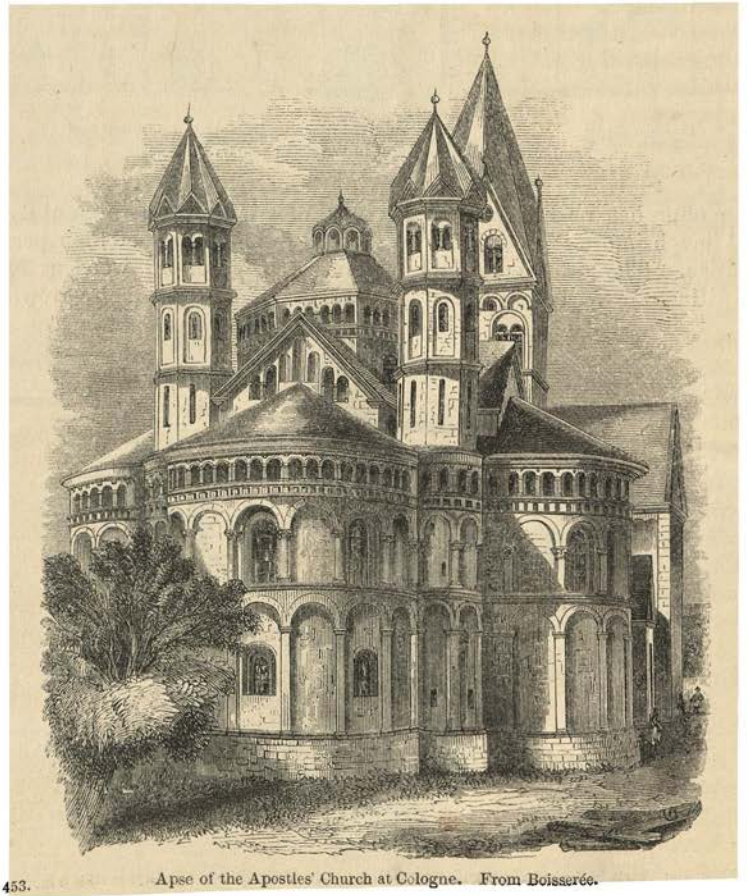
these churches remain in a nearly unaltered state at the present day, that much information might be gleaned from a study of their peculiarities. The three examples, for instance, given in woodcut No. 451, illustrate very completely the progress of German spire-growth.



452. Sta. Maria in Capitulo, Cologne. From Boisserée's Nieder Rhein. Scale 100 ft. to 1 in.

The first, that of Minden, is a very early example of the façade screen so popular throughout Germany in the middle ages. The centre example, from the cathedral at Paderborn, belonging to the middle of the 11th century, shows one of the earliest attempts at a spire-like roof to a tower, four gables being used instead of the two which were generally employed. The third illustration, from Soest, about A.D. 1200, shows the transition complete. The four gables are still there, but do not extend to the angles, nor are they the principal roof. The corners are cut off, so as to suggest an octagon, and a second roof has grown up to the form of a spire, entirely eclipsing that suggested by the gables. In this instance also the tower has become a specimen of a complete design, and, though the narthex or porch has somewhat the appearance of being stuck on, the upper part of the tower is of considerable elegance.

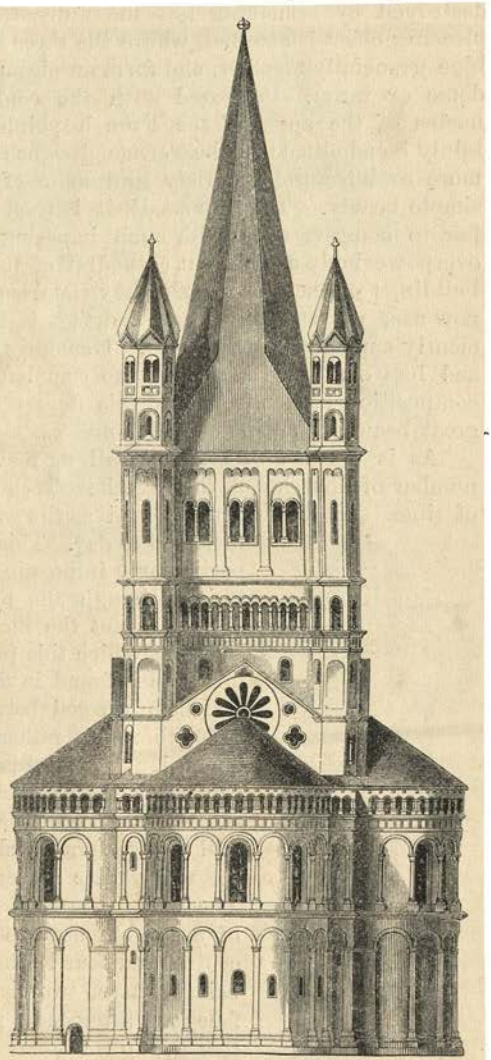
The same process of spire-growth can be traced to some extent both in England and in France, but on the whole it is by no means clear that the spire, properly so called, is not an invention from the



453. Apse of the Apostles' Church at Cologne. From Boisserée.

banks of the Rhine. Tallness of roof appears always to have been considered a beauty by German architects, and it seems to have been applied to towers earlier in Germany than in other countries.

Far more important than these, and surpassing them infinitely in beauty, is the group of churches which adorns the city of Cologne, the virtual capital, or at least the principal city, of Germany at the time of their erection. The old cathedral has perished and made way for the celebrated structure that now occupies its place. If it was like the restoration of it by Boisserée, it resembled Worms, and must have belonged to the 12th century; but there are no sufficient data for determining this point.

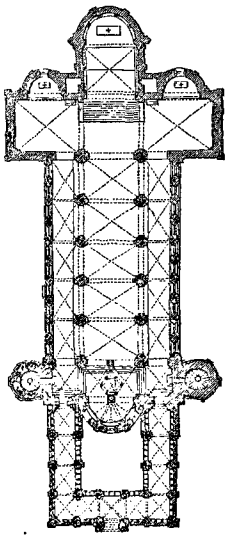


454. Apse of St. Martin's Church at Cologne. From Boisserée.
Scale 50 ft. to 1 in.

Of the other churches, that of Sta. Maria in Capitulo (woodcut No. 452), is apparently the oldest; but of the church erected in the 10th century only the nave remains, and that considerably altered. The three noble apses that adorn the east end belong to the 12th, or perhaps to the 13th century. In plan these apses are more spacious than those of the Apostles' church or of that of St. Martin (woodcuts Nos. 453 and 454), this alone having a broad aisle running round each, which gives great breadth and variety to the perspective. The apse of the church of the Apostles (erected A.D. 1035) is far more beautiful externally. This building is perhaps, taken altogether, the most pleasing example of its class, though it has not the loftiness of the great church of St. Martin, which competes more directly with the aspiring tendencies of the pointed style. These three churches, taken together, illustrate suffi-

ciently the nature and capabilities of the style which we are describing. The arrangement with three apses possesses the architectural propriety of terminating nobly the interior to which it is applied. As the worshipper advances up the nave, the three apses open gradually upon him, and form a noble and appropriate climax without the effect being destroyed by something less magnificent beyond. But their most pleasing effect is external, where the three simple circular lines combine gracefully together, and form an elegant basement for the central dome or tower. Compared with the confused buttresses and pinnacles of the apses of the French pointed churches, it must certainly be admitted that the German designs are far nobler, as possessing more architectural propriety and more of the elements of true and simple beauty. They are small, it is true, and consequently it is not fair to compare them with such imposing edifices as the great and overpoweringly-magnificent cathedral of the same town; but among buildings on their own scale they stand as yet unrivalled. As they now are, perhaps their greatest defect is that the apses are not sufficiently supported by the naves. Generally these are of a different age and less ornate style, so that the complete effect of a well-balanced composition is wanting; but this does not suffice to overpower the great beauties they undoubtedly possess.

As is the case with almost all mediæval buildings, the greater number of churches of this age have been erected at different periods of time, and the designs altered as the work proceeded, to suit the taste of the day. This circumstance makes them particularly interesting to the architectural historian, though the artist and architect must always regret the incompleteness and want of harmony which this produces. An exception to this rule is found in the beautiful abbey church at Laach, erected between the years 1093 and 1156, therefore rather early in the style. Its dimensions are small, only 215 feet internally by 62; but this is compensated for by its completeness. It is one of the few churches that possess still the western paradisus or parvis, as shown in the remarkable ancient plan found at St. Gall.[1] The western apse is applied to its proper use of a tomb-house: besides this, it has its two central and four lateral towers, two of the latter being square, two circular. It is impossible to fancy anything more picturesquely pleasing than this group of towers of various heights and shapes, or a church producing a more striking effect with such diminutive dimensions as this one possesses, the highest point being only 140 ft. from the ground line. No church, however, of the pointed Gothic



455. Plan of Church at Laach. From Geier and Görz. Scale 100 ft. to 1 in.

[1] See p. 556 *et seqq.*

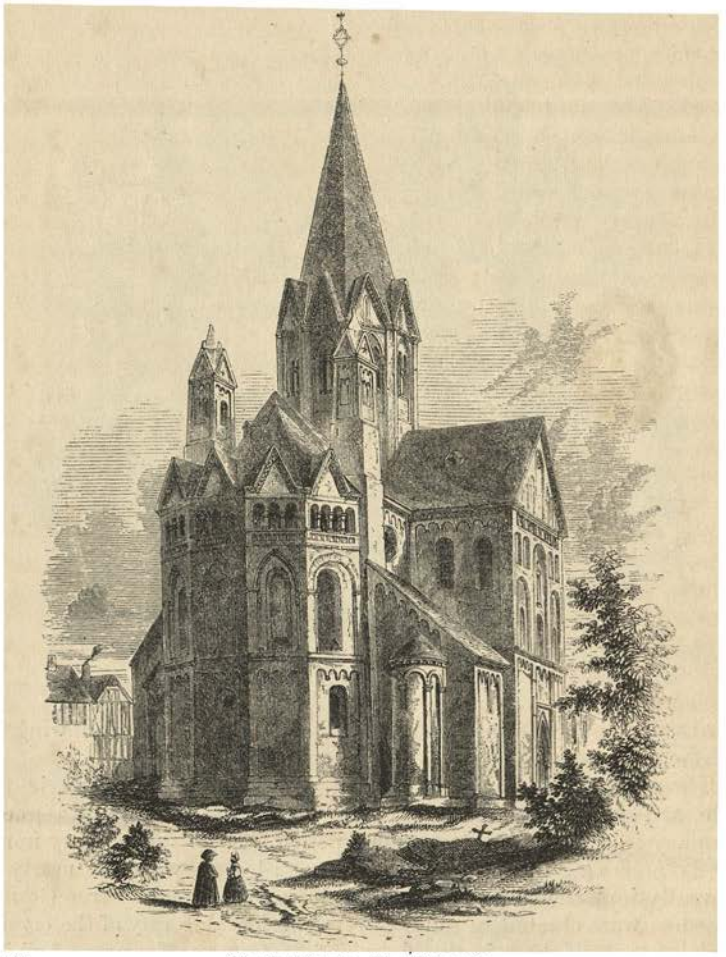
style has its sky-line so pleasingly broken, while the cornices and eaves still retain all the unbroken simplicity of classic examples, showing

456. View of Church at Laach. From Geier and Görz.

how easily the two forms might have been combined by following the path here indicated.

These are perhaps the finest and most typical buildings in this style, and sufficient to characterise the form of architecture in vogue in Germany in the great Hohenstaufen period, and in the century immediately preceding their accession to power; but they are not nearly all the really important buildings which during the epoch of true German greatness were erected in almost every considerable city of the empire. In Cologne itself there is the church of St. Gereon, the nave of which, with its crypt, belongs to the 11th century, the apse to the 12th, and the decagonal domed part to the 13th. This is a most interesting specimen of transition architecture, and as such will be mentioned hereafter. So is the church of St. Cunibert, dedicated in 1248, and hardly more advanced in style than the abbey of St. Denis near Paris, built at least a century earlier. The churches of St. George and of Sion in the same city afford interesting examples of the style. More important, however, than these are the cathedral at Bonn, the noble church at Andernach, the abbey church of Heisterbach, and that of St. Guerin in Neuss. In the same neighbourhood the little church of Zinsig is a pleasing specimen of the age when the Germans had laid aside the bold simplicity of their earlier forms to adopt the more ele-

gant and sparkling contours of pointed architecture.[1] A little farther up the Rhine the church of St. Castor at Coblentz agreeably exemplifies



457. Church at Zinsig. From Boisserée.

the later style (1157-1208). Its apse is one of the widest and boldest of its class, though deficient in height.

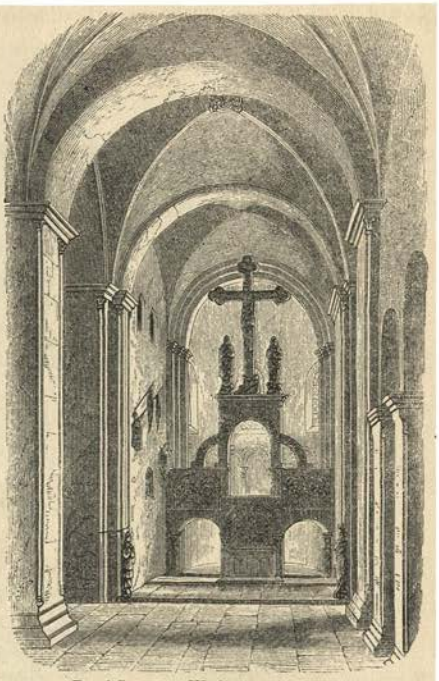
The neighbourhood of Trèves has also some excellent specimens of round Gothic, among which may be mentioned the abbey of Echternach, the church of St. Mathias, and the interesting and elegant church of Morzig.[2]

In Saxony there are many beautiful, though no very extensive, examples of the German style. Among these the two ruined abbeys

[1] For particulars of more of these churches, see Boisserée, Nieder Rhein.

[2] See Schmidt, Baudenkmale Trier, where all these are figured.

of Paulinzelle and Thal Burgal, neither of them vaulted churches, are remarkable for the simple elegance of their forms and details, showing how graceful the style was becoming before the pointed arch was introduced. The church at Wechelburg is also interesting, though somewhat gloomy, and retains a rood screen of the 12th century (woodcut No. 458), which is a rare and pleasing example of its class. The church at Hechlingen also deserves mention, and the fragment of the abbey at Gollingen is a pleasing instance of the pure Italian class of design sometimes found in Germany at this age. Its crypt, too, affords an example of vaulting of great elegance and lightness, obtained by introducing the horse-shoe arch or an arch more than half a circle in extent, which takes off the appearance of great pressure upon the capital of the pillar, and gives the vault that height and lightness which were afterwards sought for and obtained by the introduction of the pointed arch. It is still a question whether this was not the more pleasing expedient of the two. There was one objection to the use of this horse-shoe shape, that considerable difficulty arose in using arches of different spans in the same roof, which with pointed arches became perfectly easy.



458. Rood Screen at Wechelburg. From Puttrich.

459. Crypt at Gollingen. From Puttrich.

Another example of the Italian mode of design is found in the church of Rosheim in Alsace, the façade of which (woodcut No. 460) might as well be found in Verona as on this side of the Alps. Its interior

is of pleasing design, though bolder and more massive than the exterior would lead us to expect.

460. Façade of the Church at Rosheim. From Chapuy.

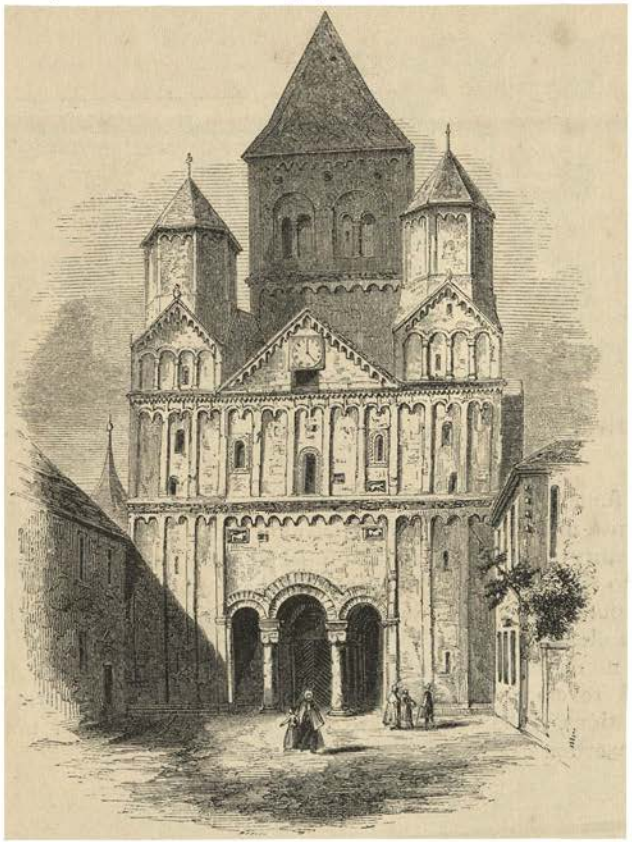
The façades of the church of Marmoutier in the same province, and of the cathedral of Guebwiller, are two examples—very similar to one another—of a compromise between the purely German and purely Italian styles of design. The small openings in the former look almost like those of a southern clime, but in its present locality give to the church an appearance of gloom by no means usual. Still it has the merit of vigorous and purpose-like character.

At Bamberg the church of St. Jacob is well worthy of attention. The Scotch church at Ratisbon is one of the best specimens in Germany of a simple basilica without transepts or towers. Its principal entrance is a bold and elegant piece of design, covered with grotesque figures whose meaning it is difficult to understand. Had it been placed at the end of the church, it might have formed the basis of a magnificent façade; but stuck as it is unsymmetrically on one side, it loses half its effect, and can only be considered as a detached piece of ornamentation, which is here, as it generally is, fatal to its effect as an architectural composition.

Before leaving ecclesiastical buildings, it is necessary to allude to a class of double churches and double chapels. Of these the typical example is the church of Swartz Rheindorf,[1] dedicated in the year

[1] Die Doppelkirche zu S.R.D., by Andreas Simons: Bonn, 1846.

1151. It is in itself a pleasing specimen of the style, irrespective of its peculiarity. It is, however, simply a church in two stories. At first

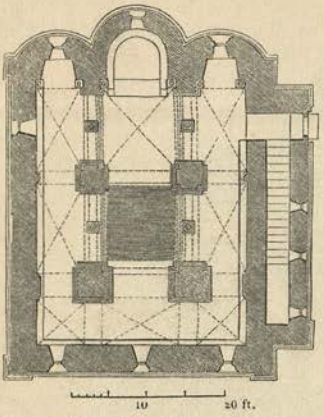


461. Church at Marmoutier. From Chapuy.

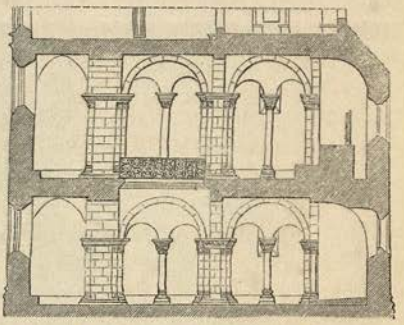
sight the lower one looks like an extensive crypt. This, however, does not seem to have been its purpose, but rather an increase of accommodation, to enable two congregations to hear the same service at the same time, there being always in the centre of the floor of the upper church an opening sufficient for those above to hear the service, and for some of them at least to see the altar below. In castle chapels, where this method is most common, the upper story seems to have been occupied by the noblesse, the lower by their retainers, which makes the arrangement intelligible enough.

In the castle at Nuremberg there is an old double chapel of this sort, but it does not appear in this instance that there was an opening between the two: if it existed, it has been stopped up. There is another at Eger, and two described by Puttrich in his beautiful work on Saxony: one of these, the chapel at Landsberg near Halle, is given in plan and section in woodcuts No. 462 and No. 463; and though small,

being only 40 ft. by 28 internally, presents some beautiful combinations, and the details are finished with a degree of elegance not gene-



462. Plan of Chapel at Landsberg. From Puttrich.



463. Section of Chapel at Landsberg. From Puttrich.

rally found in larger edifices: the other, that at Freiburg on the Unstrutt, measuring 21 ft. by 28, is altogether the best of the class, from the beauty of its capitals and the finish of every part of it. It belongs in time to the very end of the 12th, or rather perhaps to the 13th century, and from the form of its vaults and the foliation of their principal ribs, one is almost inclined to bring it down to a later period; for it would be by no means wonderful if in a gem like this the lords of the castle should revert to their old German style instead of adopting foreign innovations. The windows are of pointed Gothic, and do not appear like insertions.

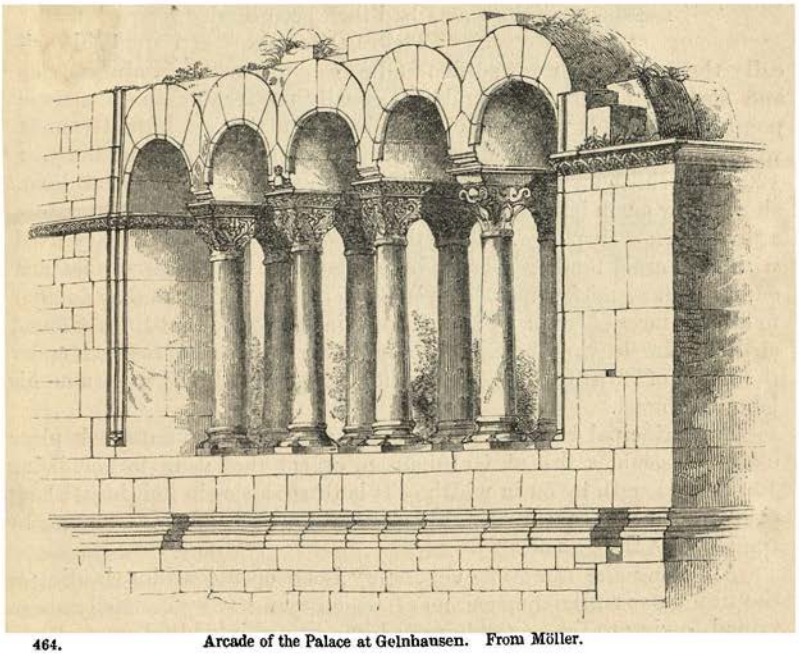
CHAPTER V.

DOMESTIC ARCHITECTURE.

CONTENTS.

Palaces of Wartburg — Gelnhausen — Houses — Windows.

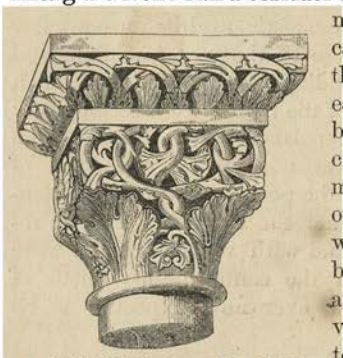
As might be expected, the remains of domestic architecture are few and insignificant as compared with those of the great monumental churches, which in that age were the buildings *par excellence* on which the wealth, the talent, and the energy of the nation were so profusely lavished. Nothing now remains of the palaces which Charlemagne built at Ingelheim or at Aix-la-Chapelle, nor of the residences of many of his successors, till we come to the period of the Hohenstaufens. Of their palaces at Gelnhausen and the Wartburg enough remains to tell us at least in what style and with what degree of taste they were erected, and the remains of the contemporary castle of Muenzenberg complete, as far as we can ever now expect it to be completed, our knowledge of the subject.



464. Arcade of the Palace at Gelnhausen. From Möller.

Besides these a considerable number of ecclesiastical cloistered edifices still remain, and some important dwelling-houses in Cologne and elsewhere; but altogether our knowledge is somewhat meagre, a circumstance that is much to be lamented, as from what we do find, we cannot fail to form a high idea of the state of the domestic arts of building at that period.

All that remains of the once splendid palace of Barbarossa at Gelnhausen is a chapel very similar to those described in the last chapter; it is architecturally a double chapel, except that the lower story was used as the hall of entrance to the palace, and not for divine service. To the left of this were the principal apartments of the palace, presenting a façade of about 112 ft. in length, and probably half as high. Along the front ran a corridor about 10 ft. deep, a precaution apparently necessary to keep out rain before glass came to be generally used. Behind this there seem to have been three rooms on each floor, the largest, or throne-room, being about 50 ft. square. The principal architectural features of what remains are the open arcades of the façade, one of which is represented in the last woodcut. For elegance of proportion and beauty of detail they are unsurpassed by anything of the age, and certainly give a very high idea of the degree of excellence to which architecture and the decorative arts had then been carried.



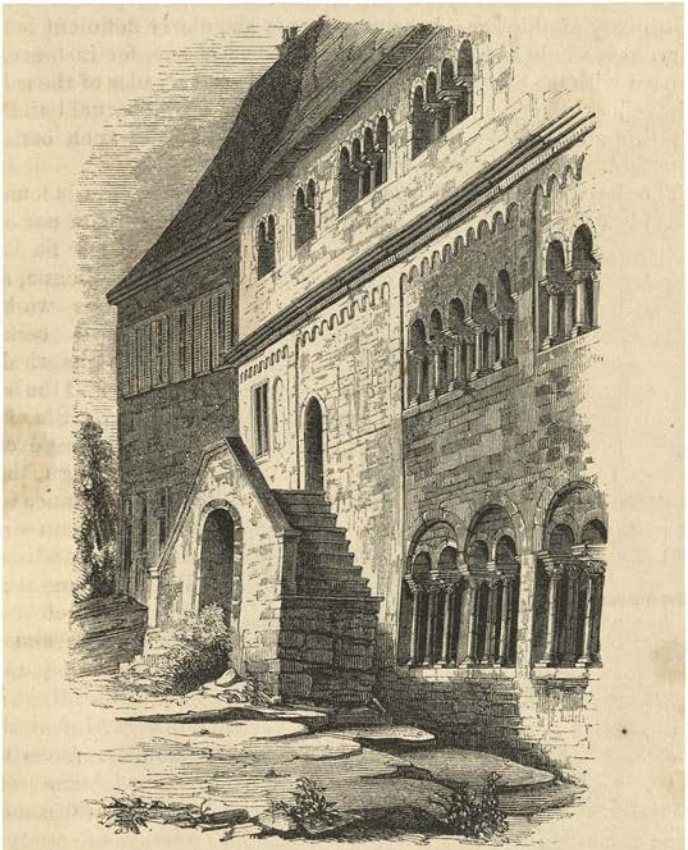
465. Capital, Gelnhausen. From Möller, Denkmaler.

The castle on the Wartburg is historically the most important edifice of its class in Germany, and its size and state of preservation render it equally remarkable in an artistic point of view. It was in one of its halls that the celebrated contest was held between the six most eminent poets of Germany in the year 1206, which, though it nearly ended fatally to one of them at least, shows how much importance was attached to the profession of literature at even that early period. Here the sainted Elizabeth of Hungary lived with her cruel brother-in-law; here she practised those virtues and endured those misfortunes that render her name so dear and so familiar to all the races of Germany; and it was in this castle that Luther found shelter after leaving the Diet at Worms, and where he resided under the name of Ritter George, till happier times enabled him to resume his labours abroad.

The principal building in the castle where these events took place closely resembles that at Gelnhausen, except that it is larger, being 130 ft. in length by 50 in width. It is three stories in height, without counting the basement, which is added to the height at one end by the slope of the ground.

All along the front of every story is an open corridor leading to the inner rooms, the dimensions of which cannot now be easily ascertained, owing to the castle having been always inhabited, and altered

in modern times to suit the convenience and wants of its recent occupiers. In its details it has hardly the elegance of Gelnhausen, but its general appearance is solid and imposing, the whole effect being obtained by the grouping of the openings, in which respect it resembles the older palaces at Venice more than any other buildings of the class. It has not perhaps their minute elegance, but it far surpasses them in grandeur and in all the elements of true architectural magnificence. Recently it has been restored, apparently with considerable judgment, and it well deserves the pains bestowed upon it as one of the best illustrations of its style still existing in Europe.



466. View of the Wartburg. From Puttrich.

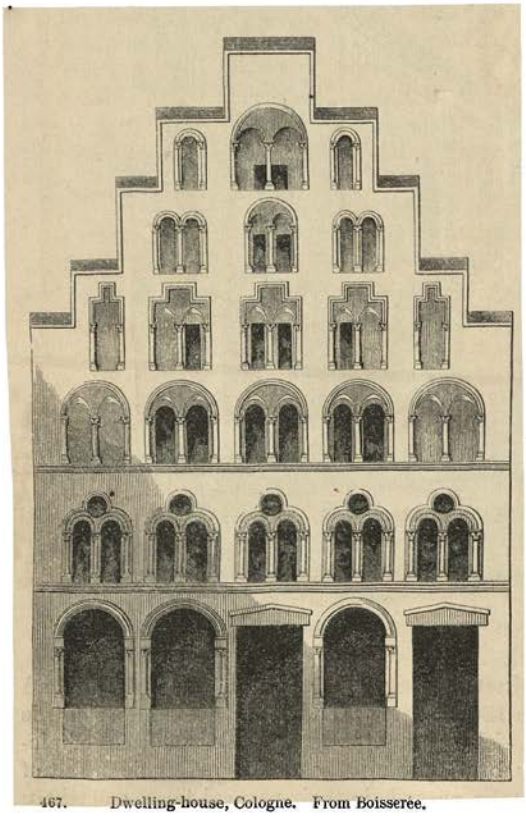
The castle on the Muenzenberg, like those of Gelnhausen and Wartburg, belongs to the 13th century, and, though less important, is hardly less elegant than either. It derives a peculiar species of picturesqueness from being built principally of the prismatic basalt of the neighbourhood, using the crystals in their natural form, and where these were not available, the stones have been rusticated with a bold-

ness that gives great value to the more ornamental parts, in themselves objects of considerable beauty.

None of these castles have much pretension to interest or magnificence as fortifications, which gives an idea of more peaceful times and more settled security than we could quite expect in that age, especially as we find in the period of the pointed style so many and such splendid fortifications crowning every eminence along the banks of the Rhine, and indeed in every corner of the land. They may have been rebuildings of castles of this date, but I am not aware of any having been ascertained to be so.

There is no want of specimens of conventual buildings and cloisters in Germany of this age; but every one is singularly deficient both in design as a whole and in elegance of parts. Not one, for instance, can compare with the beauty of Zurich. The elegant arcades of the palaces we have just been describing nowhere reappear in conventual buildings. Why this should be so it is difficult to understand, but such certainly is the fact.

The best collection of examples of German convents is found in Boisserée's 'Nieder Rhein.' But neither those of St. Gereon nor of the Apostles, nor St. Pantaleone at Cologne, merit attention as works of art, though certainly curious as historical monuments; and the lateral galleries of Sta. Maria in Capitulo are even inferior in design, though their resemblance to the style of Ravenna gives them value archæologically. The same remarks apply to the cloisters at Heisterbach, and even to the more elegant transitional buildings at Altenberg. Almost all these examples, nevertheless, possess some elegant capitals and some parts worthy of study; but they are badly put together and badly used, so that the pleasing effect of a cloistered court and conventual buildings is here almost entirely lost. The cause of this is hard to explain, when we see

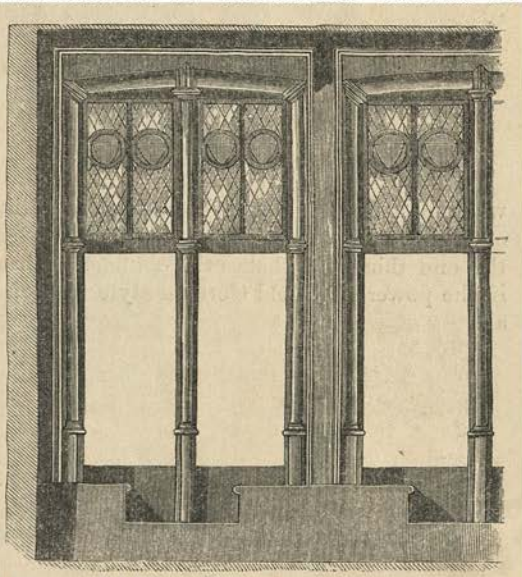


467. Dwelling-house, Cologne. From Boisserée.

so much beauty of design in the buildings to which they are generally accompaniments.

There are several dwelling-houses in Cologne and elsewhere which show how early German town residences assumed the tall gabled fronts which they retained to a very late period through all the changes which took place in the details with which they were carried out. In the illustration (woodcut No. 467) there is little ornament, but the forms of the windows and the general disposition of the parts are pleasing, and the general effect produced certainly satisfactory. The size of the lower windows is remarkable for the age, and the details are pure, and executed with a degree of lightness which we are far from considering as a general characteristic of so early a style.

The windows at the back of the house, illustrated in the last woodcut, are so large, that were it not for the unmistakeable character of the first, and of some of its details, we might be inclined to suspect that it belonged to a much more modern age. As shown in the woodcut No. 468, its details are as elegant as anything in domestic architecture of the pointed style.



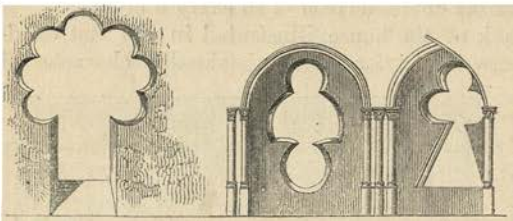
468. Back Windows in Dwelling-house, Cologne.

There are several minor peculiarities which perhaps it might be more regular to mention here, but which it will be more convenient to allude to when we return to Germany in speaking of the pointed style. One, however, cannot thus be passed over—the form which windows in churches and cloisters were beginning to assume just before the period when the transition to the pointed style took place.

Up to that period the Germans showed no tendency to adopt window tracery, in the sense in which it was afterwards understood, nor to divide their windows into compartments by mullions. I do not even know of an instance in any church of the windows being so grouped together as to suggest such an expedient. All their older windows, on the contrary, are simple round-headed openings, with the jambs more or less ornamented by nook-shafts and other such expedients. At the end of the 12th and beginning of the 13th century they seem to have desired to render the openings more ornamental, probably because tracery had to a certain extent been adopted in

France and the Netherlands at that period. They did this first by foiling circles and semicircles, the former a pleasing, the latter a very unpleasing, form of window, but not so bad as the three-quarter windows—if I may so call them—used in the church of Sion at Cologne (woodcut No. 469) and elsewhere: these, however, are hardly so objectionable as the fantastic shapes they sometimes assumed, as in these examples (woodcut No. 470), taken from St. Guerin at Neuss. Many others might be quoted whose forms are constructively bad without being redeemed by an elegance of outline that sometimes enables us to overlook their other faults. The more fantastic of these, it is true, were seldom glazed, but mere openings in towers or into roofs. These windows are also found generally in transition specimens when men are trying experiments before settling down to a new course of design. Notwithstanding this, they are very objectionable, and are the one thing that shakes the confidence that might otherwise be felt in the power of the old German style to perfect itself without foreign aid.

469. Windows from Sion Church, Cologne. From Boisserée.



470. Windows from St. Guerin at Neuss. From Boisserée.

BOOK III.

FRANCE.

CHAPTER I.

CONTENTS.

Division of Subject — Provence — Churches at Avignon, Arles, Alet, Fontifroide, Maguelone, Vienne — Round churches — Towers — Cloisters.

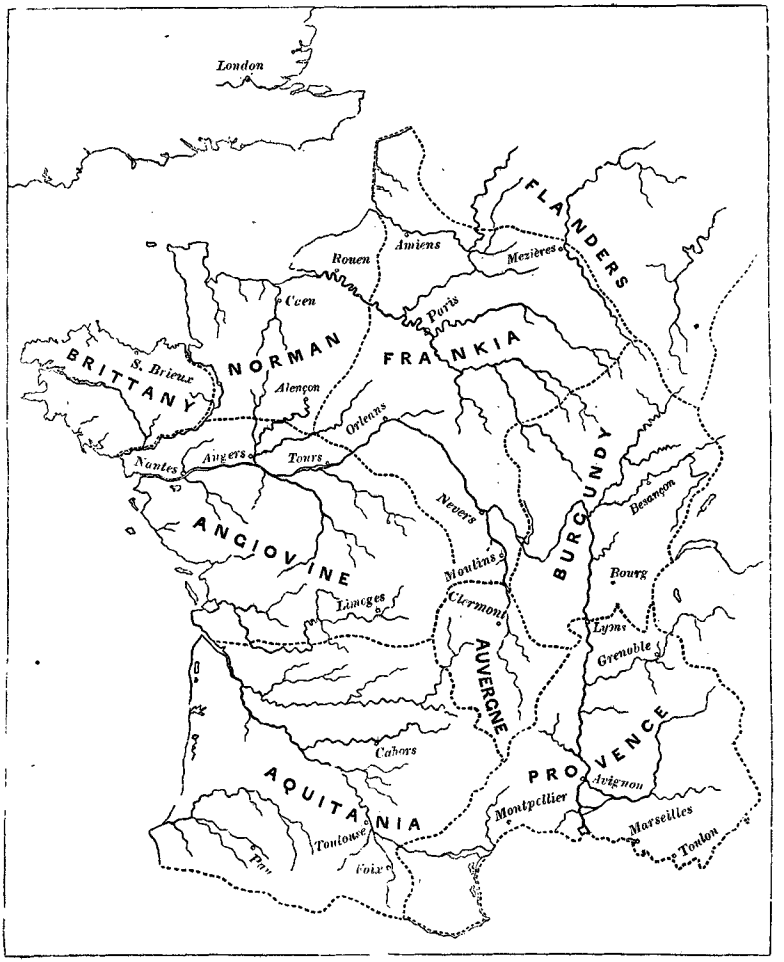
CHRONOLOGY.

	DATES.		DATES.
Charlemagne	A.D. 768-813	Philip III., the Hardy	A.D. 1270
Rollo, first Duke of Normandy	911	Philip IV., or the Fair	1285
Hugh Capet	987	Philip VI. of Valois	1328
William II. of Normandy, or the Conqueror	1055-1086	Battle of Crecy	1346
Henry I. of France	1031	John II., the Good	1350
Philip I., or l'Amoureux	1060	Charles V., the Wise	1364
Louis VI., or le Gros	1108	Charles VI., the Beloved	1380
Louis VII., or le Jeune	1137	Charles VII., the Victorious	1422
St. Bernard of Clairvaux	1091-1153	Joan of Arc	1412-1431
Philip II., or l'Auguste	1180	Louis XI.	1461
Louis VIII., or the Lion	1223	Charles VIII.	1483
Louis IX., or the Saint	1226	Louis XII.	1498
		Francis I.	1515

IT is only of late years that the antiquaries of France have turned their attention to the mediæval monuments of their country. The progress that has been made is worthy of that brilliant people, and of the zeal and rapidity with which they enter upon any new undertaking. Still the subject must be considered as hitherto far from being thoroughly and systematically known. French architecture presents a field of inquiry of vast extent. This is owing to the circumstance that no country in Europe presents so many nationalities mixed together in such inextricable confusion as the now uniform and united empire of France. It is not at the present day easy to understand how many races, religions, and customs have been swept away and levelled during the eight centuries of wars, persecutions, and despotism which have reduced her to one religion, one language, and one central government ramifying to the remotest corners of the land; but till they are known and understood, it is in vain to hope to appreciate either the history or the forms of the beautiful style of architecture that adorns every part of the land. At the same time, it is perhaps only through this architecture that we can either understand or know what these races were, and what their

history or locality. In no other country is the importance of the mutual relations of ethnography and architecture so evident as in France.

The annexed map, though imperfect, points out the chief divisions of the subject before the progress of Frankish domination and the crusades against the Waldenses had obliterated some of the principal distinctions of the country.[1] Its main features must be



471. Map of the Architectural Division of France.

[1] A small chart of the same sort has been published by M. de Caumont,[a] which, though an improvement, still leaves much to be desired; but until every church is examined, and every typical specimen at least published, it is impossible to mark out more than the general features of the chart. Imperfect, however, as they are in this one, they are still more numerous and more detailed than it will be easy for us to follow and to trace out in the limited space of this work.

[a] Abécédaire d'Architecture, p. 174.

pointed out and borne in mind, or the sequel will be nearly unintelligible.

The first and most obvious subdivision of France is that into the provinces of North and South, by a line passing through the valley of the Loire. To the north of it, the Franks, Burgundians, and Normans—all German races or closely allied to them—settled in such numbers as nearly to obliterate the original Celtic and other races, introducing their own feudal customs, and a style of architecture not only essentially Gothic, but virtually the Gothic *par excellence*.

To the south of this line the Teutonic races never settled, nor did they gain the ascendancy here till after the campaigns of Simon de Montfort, before alluded to, when the sword and the faggot extinguished the Protestantism of the races, and introduced a bastard Gothic style into the land. Before that time the Romanesque style, derived from the Romans, had gradually been undergoing a process of change and naturalization, taking a form in which we can trace the gradually rising influence of the Northern styles. It was, like the German Round Gothic, a distinct and separate style, till superseded by the all-pervading Gothic from the north of France.

As will be observed on the map, the line dividing these two provinces includes both banks of the Loire as high as Tours, dividing Brittany into two equal halves. It then follows the course of the Cher to the northern point of Auvergne, leaving Bourges and Bourbon to the north; thence by a not very direct line it passes east, till it reaches the Rhone at Lyons. It follows that stream to the Lake of Geneva, and leaves the whole valley of the Saône to the Burgundians; thus dividing France into two nearly equal and well-defined ethnographic and architectural provinces.

As it is necessary to distinguish the styles of these provinces by names, I should propose to call that of the southern the Romance,[1] and that of the northern Frankish.

Turning first then to the south, it is necessary to subdivide that province into at least 4, or perhaps more correctly 6 subdivisions. The first of these is Provence, and the style the Provençal, a name frequently used by French archæologists, and familiar to them. It occupies the whole valley of the Rhone as far as Lyons, and along the coast between the hills and the sea to the Pyrenees. Within these limits there is not, so far as I know, a single church or building that can lay a fair claim to the title of Gothic. All are Romanesque, or, more properly, Romance, the earliest examples with a native element timidly peering through, which afterwards displays itself more boldly. What instances there are of late Gothic are so bad and so evidently importations as to deserve no mention.

The next province may be called the Aquitanian, comprising the

[1] The use of this term is a little awkward at first from its having another meaning in English; it has, however, been long used by English etymologists to distinguish the Romance languages, such as Italian, Spanish, and French, from those of Teutonic origin, and is here used in precisely the same sense as applied to architecture—to those styles derived from the Roman, but one degree more removed from it than the Romanesque.

whole of the valley of the Garonne and its tributaries—all that country in fact where the names of towns end in the Basque article *ac*. Its style is not nearly so closely allied to the Romanesque as that of Provence; and though tending towards a Gothic feeling, is always so mixed with the native element as to prevent that style from ever prevailing, till forcibly introduced by the Franks in the 12th and 13th centuries.

The third is designated that of Anjou, or the Angiovine, from its most distinguished province. This includes the lower part of the Loire, and is bounded on the north-east by the Cher. Between it and the sea is a strip of land, including the Angoumois, Saintonge, and Vendée, which it is not easy to know where to place. It may belong, so far as we yet know, to either Aquitania or Anjou, or possibly may deserve a separate title altogether; but in the map it is annexed for the present to Poitou or the Angiovine province.

In Brittany the two styles meet, and are so mixed together that it is impossible to separate them. There it is neither pure Romance nor pure Frankish, but a style partaking of the peculiarities of each without belonging to either.

Besides these, there is the small and secluded province of Auvergne, having a style peculiarly its own, which, though certainly belonging to the southern province, is easily distinguished from any of the neighbouring styles, and is one of the most pleasing to be found of an early age in France.

Taking then a more general view of the Southern province, it will be seen that if a line were drawn from Marseilles to Brest, it would pass nearly through the middle of it. At the south-eastern extremity of such a line we should find a style almost purely Romanesque, passing by slow and equal gradations into a Gothic style at its other extremity.

On turning to the Frankish province the case is somewhat different. Paris is here the centre, from which everything radiates; and though the Norman invasion, and other troubles of those times, with the rebuilding mania of the 13th century, have swept away nearly all traces of the early buildings, still it is easy to see how the Gothic style arose in the Isle of France, and thence spread to all the neighbouring provinces.

Not to multiply divisions, we may include in the Northern province many varieties that will afterwards be marked as distinct in maps of French architecture, especially at the south-east, where the Nivernois and Bourbonnois, if not deserving of separate honours, at least consist of such a complete mixture of the Frankish, the Burgundian, with the Southern styles, that they cannot strictly be said to belong to any one, and yet partake of all. The Northern, however, is certainly the predominant element, and with that therefore they should be classed.

Beyond this to the eastward lies the great Burgundian province, having a well-defined and well-marked style of its own, influenced by or influencing all those around it, but possessing more similarity to the German styles than to those of France, though the Roman influ-

ence is here strong enough to give it an apparent affinity with the Provençal. This is, however, an affinity of form, and not of spirit; for no style is much more essentially Gothic than that of Burgundy.

To the westward lies the architectural province of Normandy, one of the most vigorous offshoots of the Frankish style; and from the power of the Norman dukes in the 11th and 12th centuries, and the accidental circumstance of its prosperity in those centuries when the rest of France was prostrate from their ravages and torn by internal dissensions, the Round Gothic style shows itself here with a vigour and completeness not found elsewhere. It is, however, evidently only the Frankish style based remotely on Roman tradition, but which the Barbarians used with a freedom and boldness which soon converted it into a purely national Gothic art. This soon ripened into the complete Gothic style of the 13th century, which was so admired as soon to spread itself over the whole face of Europe, and which became the type of all Gothic architecture.

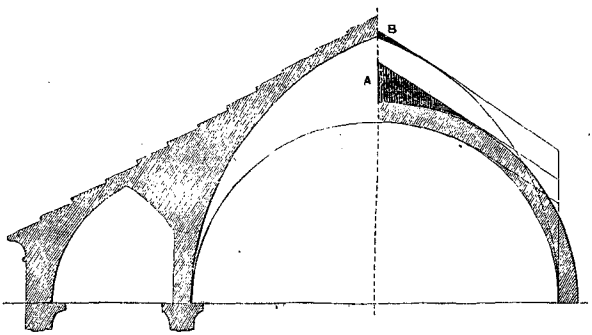
Alsace is not included in this enumeration, as it certainly belongs wholly to Germany. Lorraine too is more German than French, and if included at all, must be as an exceptional transitional province. French Flanders belongs, in the age of which we are now speaking, to the Belgian provinces behind it, and may therefore also be disregarded at present; but even after rejecting all these, enough is still left to render it difficult to remember and follow all the changes in style introduced by these different races, and which marked not only the artistic but the political state of France during the middle ages, when the six territorial peers of France, the Counts of Toulouse, Flanders, Aquitania, Normandy, Burgundy, and Champagne, represented the six principal provinces of the kingdom, under their suzerain, the Count or King of Paris. These very divisions might now be taken to represent the architectural distinctions, were it not that the pre-eminence of these great princes belongs to a later epoch than the architectural divisions which we have pointed out, and which we must now describe somewhat more at length.

PROVENCE.

There are few chapters in the history of mediæval architecture which it would be more desirable to have fully and carefully written than that of the style of Provence from the retirement of the Romans to the accession of the Franks. This country, from various causes, retained more of its former civilisation through the dark ages than any other, at least on this side of the Alps. Such a history, however, is to be desired more in an archæological than in an architectural point of view, for the Provençal churches, compared with the true Gothic, though numerous and elegant, are small, and most of them have undergone such alterations as to prevent us from judging correctly of their original effect. Still their importance to the history of art can hardly be over-estimated, more especially towards the determination of the much-mooted question of the history of the pointed arch, which has hitherto been the great difficulty in the way of the correct deter-

mination of the age of these churches. It is a curious fact that all the churches of Provence, from the age of Charlemagne to that of St. Louis, were vaulted, and have their vaults constructed on the principle of the pointed arch. Now it has long been a received dogma with the antiquaries of France as well as those of England, that the pointed arch was first introduced in the 12th century—the first example being assumed to be the work of Abbot Suger at St. Denis (1144-1152). It follows that all who have written on the subject of Provençal architecture have felt themselves forced to bring down the age of the churches in question, or at least of their roofs, below this period.

The history of the pointed arch has already been sketched above (p. 379 *et seqq.*), and need not be repeated here. It is now perfectly well known that it was currently used in the East from at least the time of Constantine.[1] We need not therefore feel surprised that a people trading with the Levant from their great port of Marseilles should have thence borrowed this feature; or perhaps we might rather say, that a people descended from a colony of Pelasgic Greeks should revive an old and time-honoured form when they found it particularly suited to their constructive purposes. So remarkably suitable indeed was it that we should not wonder even if they had actually invented it *de novo*, and it is not without regret that we perceive it abandoned or perverted. This use of the pointed arch will be evident from the annexed diagram, which is a section of the roof of one of the churches at Vaison. The object evidently was to lay the roof or roofing tiles directly on the vault, as the Romans had done on their domes, and also,



472. Diagram of Vaulting. South of France.

so far as we know, on their thermæ. Had they used a circular vault for this purpose, it is evident, from the right-hand side of the diagram, that to obtain the straight-lined roof externally, and the watershed, it would have been requisite to load the centre of the vault to a most dangerous extent, as at A; whereas with the pointed arch it only

[1] For the detail of the argument I must refer the reader to a paper read by me to the Institute of British Architects on June 18th, 1849, and published in the 'Builder,' and other papers of the time. See also a paper read in the same place in the following month (July, 1849), by Sir Gardner Wilkinson.

required the small amount of filling up shown at B, and even that might have been avoided by a little contrivance if thought necessary. By adopting the pointed form the weights are so distributed as to ensure stability and to render the vault self-supporting. It has already been observed that the Gothic architects everywhere treated these vaults as mere false ceilings, covering them with a roof of wood—an expedient highly objectionable in itself, and the cause of the destruction, by fire or from neglect, of almost all the churches we now find in ruins all over Europe; whereas, had they adhered either to the Roman or Romance style of roofing, it would not have required the constant upholding hand of man to protect the buildings from decay.

The one obstacle in the way of the general adoption of this mode of roofing was the difficulty of applying it to intersecting vaults. The Romans, it is true, had conquered the difficulty; so had the Byzantine architects, as we shall hereafter see, displaying the ends of the vaults as ornaments; and even at St. Mark's, Venice, this system is adopted, and with the additional advantage of the pointed roof might have been carried further. Still it must be confessed that it was not easy—that it required more skill in construction and a better class of masonry than was then available to do this efficiently and well. The consequence is, that all the Romance pointed vaults are simple tunnel-vaults without intersections, and that the Gothic architects, when they adopted the form, slurred over the difficulty by hiding the upper sides of their vaults beneath a temporary wooden roof, which protected them from the injuries of the weather. This certainly was one of the greatest mistakes they made: had they carefully profiled and ornamented the exterior of the stone roofs in the same manner as they ornamented the inside, their buildings would have been not only much more beautiful, but much more permanent, and the style would have been saved from the principal falsity that now deforms it. Even as it is, if we wished intelligently to adapt the Gothic to our purposes, instead of merely copying it, this is one of the points to which we ought first to turn our attention.

Another circumstance which may be alluded to here, when speaking on this subject, which led to the adoption of the pointed arch at an early age in the southern provinces of France, was the use of domes as a roofing expedient. These, it is true, are not found in Provence, but they are common in Aquitaine and Anjou—some of them certainly of the 11th century; and there can be little doubt but that these are not the earliest, though their predecessors have perished or not yet been brought to light.

It has already been explained (p. 381) how difficult it is to introduce pendentives between two circular arches, and how naturally and easily they fit between two of a pointed form. At St. Front, Perigeux, at Moissac, and at Loches we find the pointed arch, introduced evidently for this purpose, and forming a class of roofs more like those of mosques in Cairo than any other building in Europe. It is true they now look bare and formal—their decorations having been originally painted on stucco, which has peeled off; but still the variety of

form and perspective they afford internally, and the character and truthfulness they give to the roof as seen from without, are such advantages that we cannot but regret that these two expedients of stone external roofs and domes were not adopted in Gothic. Had the great architects of that style in the 13th century carried out these with their characteristic zeal and earnestness, they would have left us a style in every respect infinitely more perfect and more beautiful than the one that has come down to us, and which we are copying so servilely, instead of trying, with our knowledge and means of construction, to repair the errors and omissions of our forefathers, and out of the inheritance they have left us to work out something more beautiful and more worthy of our greater refinement and advanced civilisation.

As enthusiastic admirers of the architecture of the Greeks, we might at least, we should think, have taken a hint from them: they could not vault, and consequently were obliged to construct their roofs with wood; but they covered their temple-roofs externally with tiles of stone and marble, making them to appearance as solid, and certainly quite as ornamental as the walls. In this, as in most things, their practice was diametrically opposed to that of the mediæval architects. The internal roof of the latter was of stone, the outer one of wood: the Greeks, on the other hand, put the wood internally, the stone on the exterior. The happy medium seems to be that which the Romance architects aimed at—a complete homogeneous roof, made of the most durable materials and ornamented, both externally and internally, and there can be little doubt but that this is the only legitimate and really artistic mode of effecting this purpose, and the one to which attention should now be turned.[1]

Among the Provençal churches, one of the most remarkable is Notre Dame de Doms, the cathedral at Avignon. Like all the others, its dimensions are small as compared with those in the northern province, as it is only 200 ft. in length, and the nave about 30 ft. in width. The side aisles have been so altered and rebuilt, that it is difficult to say what their plan and dimensions were.

The most remarkable feature and the least altered is the porch, which is so purely Romanesque that it might almost be said to be copied from such a building as the arches on the bridge of Chamas (woodcut No. 276). It presents, however, all that attenuation of the horizontal features which is so characteristic of the Lower Empire, and cannot rank higher than the Carlovingian era; nor, indeed, can it be brought lower, being too purely classical for any of the styles after that date. The same ornaments are found in the interior, and being integral parts of the ornamentation of the pointed roof, have led to various theories to account for this copying of classical details at a later period. It has been sufficiently explained above, how early the pointed arch was introduced as a vaulting expedient in this quarter;

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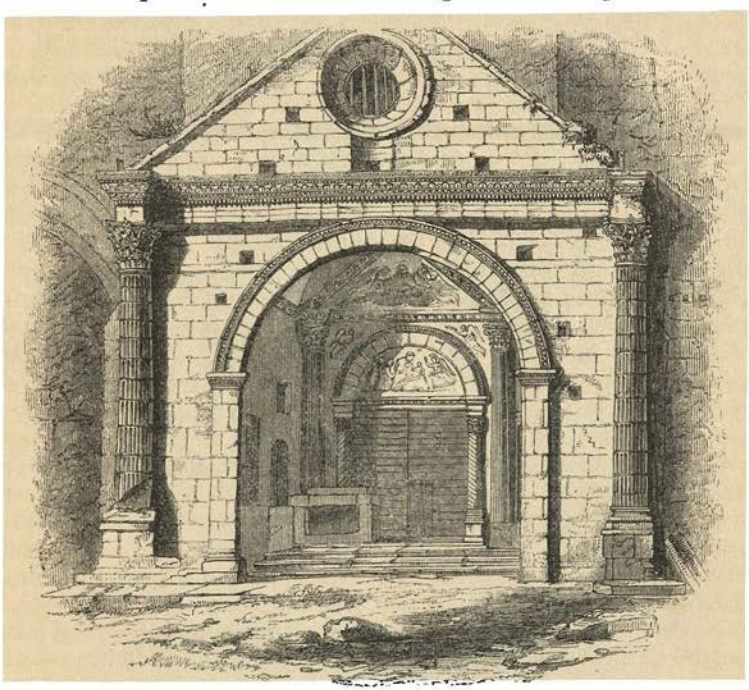
[1] The Scotch and Irish Celts seem to have had a conception of this truth, and in both these countries we find some bold attempts at true stone roofs: the influence, however, of the Gothic races overpowered them, and the mixed roof became universal.

and that difficulty being removed, we may safely ascribe the whole of the essential parts of this church to the age of Charlemagne.



473. Porch of Notre Dame de Doms, Avignon. From Laborde's Monumens de la France.

Next perhaps in importance to this, is the church of St. Trophime at Arles, the nave of which, with its pointed vault, probably belongs to the same age, though its porch (woodcut No. 474), instead of being the earliest part, as in the last instance, is here the most modern, having been erected in the 11th century, when the church to which it is attached acquired additional celebrity by the translation of the body of St. Trophime to a final resting place within its walls. As it is, it forms a curious and interesting pendant to the one last quoted, showing how in the course of 4 centuries the style had passed from debased Roman to a purely native form, still retaining a strong tradition of its origin, but so used and so ornamented, that were we not able to trace back the steps one by one, by which the porch at Avignon led to that of Arles, we might almost be inclined to doubt the succession.

The porches at Aix, Cuxa, Coustonges, Prades, Valcabre, Tarascon, and elsewhere in this province, form a series of singular interest, and of great beauty of detail mixed with all the rich exuberance of our own Norman doorways, and follow one another by such easy gradations, that the relative age of each may easily be determined.

The culminating example is that at St. Gilles, near the mouths of the Rhone, which is by far the most elaborate church of its class, but

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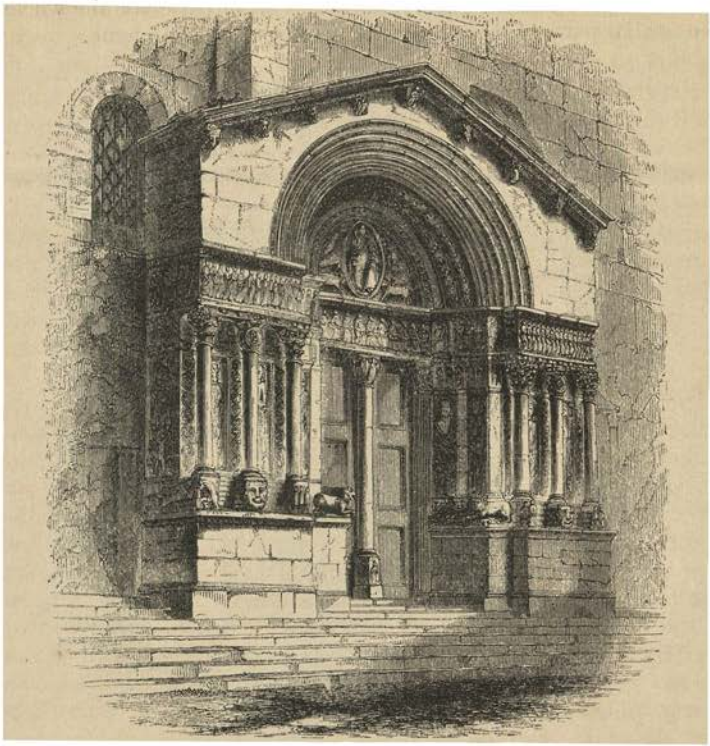


474. Porch of St. Trophime, Arles. From Chapuy, Moyen Age Monumental.

so classical in many of its details, that it probably is somewhat earlier than this one at Arles, which it resembles in many respects, though far exceeding it in magnificence. It consists of three such porches placed side by side, and connected together by colonnades—if they may be so called—and sculpture of the richest class, forming altogether a frontal decoration unsurpassed, except in the northern churches of the 13th century. Such porches, however, as those of Rheims, Amiens, and Chartres, surpass even these in elaborate richness and in dimensions, though it may be questioned if they are really more beautiful in design.

There is another church of the Carlovingian era at Orange, and one at Nismes, probably belonging to the 9th century; both however very much injured by alterations and repairs. In the now deserted city of Vaison there are two churches, so classical in their style, that we are not surprised at M. Laborde, and the French antiquaries in general, classing them as remains of the classical period. In any other country on this side of the Alps such an inference would be inevitable; but here another code of criticism must be applied to them. The oldest, the chapel of St. Quinide, belongs probably to the 9th or 10th century. It is small, but singularly elegant and classical in the

style of its architecture. The apse is the most singular as well as the most ancient part of the church, and is formed in a manner of which no other example is found anywhere else, so far as I know. Externally it is two sides of a square, internally a semicircle; at each angle of the exterior and in each face is a pilaster, fairly imitated from the Corinthian order, and supporting an entablature that might very well mislead a Northern antiquary into the error of supposing it was a Pagan temple.

The cathedral, though larger, is more Gothic both in plan and detail, though not without some classical features, and entirely free from the bold rudeness of style we are so accustomed to associate with the architecture of the 11th century, to which it belongs. Its system of vaulting has already been explained (woodcut No. 472), but neither of these buildings have yet met with the attention they so richly merit from those who are desirous of tracing the progress of art from the decline of the pure Roman to the rise of the true Gothic styles.

475. Apse of Church at Alet. From Taylor and Nodier, Voyages dans l'Ancienne France.

Taking it altogether, perhaps the most elegant specimen of the style is the ruined—now, I fear, nearly destroyed—church of Alet, which, though belonging to the 11th century, was singularly classical in its details, and wonderfully elegant in every part of its design. Of this the apse, as having undergone no subsequent transformation, was by far the most interesting, though not the most beautiful por-

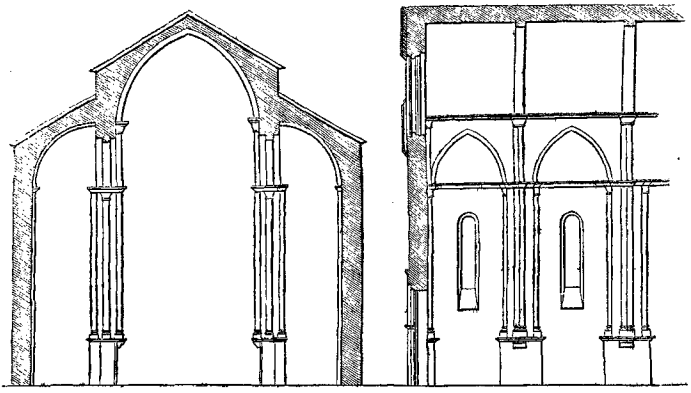
tion. The upper part was adorned with dwarf Corinthian pilasters, surmounted by a cornice that would not discredit the buildings of Diocletian at Spalatro; the lower part by forms of more Mediæval character, but scarcely less elegance. In the interior, the triumphal arch, as it would be called in a Roman basilica, is adorned by two Corinthian pillars, designed with the bold freedom of the age, though retaining the classical forms in a most unexpected degree.

476. Internal Angle of Apse at Alet. From Taylor and Nodier.

The rest of the church is as elegant as these parts, though far less classical, the necessities of vaulting and construction requiring a different mode of treatment, and the age permitting a departure from conventional forms, of which in the apse the architect does not seem to have considered himself at liberty to make use.

In strange contrast to this is the bold, rude, and gloomy church of Carcassonne, erected by men who seem to have had far more sympathy with the embattled towers that surround it than with the elegance of cloistered retirement which seems to have presided over the other. Though both of the same age, nothing can well be more different than these two churches, the one being as Gothic as the other is classical. But even the church at Carcassonne is not devoid of classical reminiscences in the Corinthian character of its pilasters and their capitals, though these harmonise but ill with the massive piers to which they are attached, and the gloomy pointed vault supported by them.

The church at Fontifroide, near Narbonne, shows the style in its completeness, perhaps better than any other example. There not only the roof is pointed, but all the constructive openings have assumed the same forms. The windows and doorways, it is true, still retain their circular heads, and did retain them as long as the native style flourished, the pointed-headed opening being only introduced by the Franks under Simon de Montfort.



477. Longitudinal and Cross Section of Fontifroide Church. From Taylor and Nodier.

The section across the nave shows the form of the central vault, which the other section shows to be a plain tunnel-vault unbroken by any intersection throughout the whole length of the nave. The side aisles are roofed with half vaults, forming abutments to the central arches—the advantage of this construction being, as before explained, that the tiles or paving-stones of the roof rest directly on the vault without the intervention of any carpentry. Internally also the building displays an elegant simplicity and constructive propriety. Its chief defect is the darkness of the vault from the absence of a clerestory, which, though tolerable in the bright sunshine of the South, could not be borne in the more gloomy North. It was to correct this, as we shall afterwards perceive, that in the North the roof of the aisles was first raised to the height of that of the central nave, light being admitted through a gallery. Next the upper roof of the aisles was cut away, with the exception of mere strips or ribs left as flying buttresses. Lastly, the central vault was cut up by intersections, so as to obtain space for windows to the very height of the ridge. It was this last expedient that necessitated the adoption of the pointed-headed window; which might never have been introduced but for the invention of painted glass, which, requiring larger openings, compelled the architects to bring these windows close up to the lines of the constructive vaulting, and so follow its forms. In the South, however, painted glass never was, at least in the age of which we are now speaking, a favourite mode of decoration, and the windows remained so small as never to approach or interfere in any way with the lines of the vault, and they therefore retained their national and more beautiful circular-headed termination. The arrangements for lighting are, however, undoubtedly the most defective part of the arrangements of the Provençal churches, and have given rise to its being called a "cavern-like Gothic,"[1] from the gloom of their interiors as compared with the glass walls of their Northern rivals. Still it by no means

[1] Wood's Letters of an Architect, vol. i. p. 163.

follows that this was an inherent characteristic of the style, which could not have been remedied by further experience; but it is probable that no ingenuity would ever have enabled this style to display these enormous surfaces of painted glass, whose introduction was, if not the only, at least the principal motive of all those changes which took place in the Frankish provinces.

478. Doorway in Church at Maguelone. From Renouvier, Monumens de Bas Languedoc.

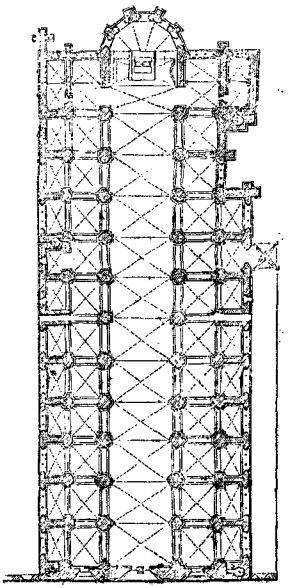
It would be tedious to attempt to describe the numerous churches of the 11th and 12th centuries which are found in every considerable town in this province: some of them, however, such as Elne, St. Guillem le Désert, St. Martin de Landres, Vignogoul, Valmagne, Lodève, &c., deserve particular attention, as exemplifying this style, not only in its earlier forms, but after it had passed into a pointed style, though differing very considerably from that of the North. Among these there is no church more interesting than the old fortalice-like church of Maguelone, which, from its exposed situation, open to the attacks of Saracenic corsairs as well as Christian robbers, looks more like a baronial castle than a peaceful church. One of its doorways shows a curious admixture of classical, Saracenic, and Gothic taste, which only could be found here; and as it bears a date (1178), it marks an epoch in the style to which it belongs.

Had it been completed, the church of St. Gilles would perhaps have been the most splendid of the province. Its portal has already been spoken of, and is certainly without a rival; and the lower church, which belongs to the 11th century, is worthy of its magnificence. It was, however, either never finished, or was subsequently ruined along with the upper church, which was commenced in the year 1116 by Raymond IV., Count of St. Gilles. This too was probably never completed, or if it was, it was ruined in the wars with the Huguenots. Even in its present state, and though wanting the richness of the earlier examples, it perhaps surpasses them all in the excellence of its masonry, and the architectural propriety of all its parts.

Besides these, there is an important church at Valence of the 11th century, which seems to be an almost expiring effort of the "cavern-like" style. In other respects it resembles the Northern styles so much as almost to remove it from the Provençal class. This is even more true of the cathedral at Vienne, which is nevertheless the largest and finest

of the churches of Provence, but which approaches, both in style and locality, very closely to the Burgundian churches.

Its plan is extremely simple, having no transept and no aisle trending round the apse, as most of the Northern churches have. It consists of 3 aisles, the central one 35 ft. wide between the piers, the others 14 ft. The buttresses are internal, as was usual in the South, forming chapels, and making up the whole interior width to 113 ft. by a length internally of 313, so that it covers somewhere about 35,000 ft. This is only half the dimensions of some of the great Northern cathedrals, but the absence of transepts, and its generally judicious proportions, make this church look much larger than it really is.



479. Cathedral, Vienne. From Wiebeking. Scale 100 ft. to 1 in.

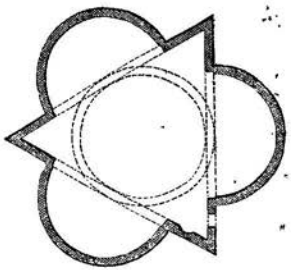
The west front and the 3 western bays are of the 16th century; the next 7 are of an early style of pointed architecture, with semi-Roman pilasters, which will be described in speaking of Burgundian architecture, and which belong probably to the 11th or beginning of the 12th century. The apse is ascribed to the year 952, but there are no drawings on which dependence can be placed sufficient to determine the date.

Besides this, there is another church, St. André le Bas at Vienne, belonging to the 11th century, whose tower is one of the most pleasing instances of this kind of composition in the province, and though evidently a lineal descendant of the Roman and Italian campaniles, displays an amount of design seldom met with beyond the Alps.

CIRCULAR CHURCHES.

The round shape seems never to have been a favourite for sacred buildings in Provence, and consequently was never worked into the apses of the churches, nor became an important adjunct to them. One of the few examples found is a small baptistery attached to the cathedral at Aix, either very ancient or built with ancient materials, and now painfully modernised. At Riez there is a circular detached baptistery, usually, like the churches at Vaison, called a pagan temple, but evidently of Christian origin, though the pillars in the interior seem undoubtedly to have been borrowed from some more ancient and classical edifice. But the finest of its class is the church at Rieux, probably of the 11th century. Internally the vault is supported by 4 piers and 3 pillars, producing an irregularity far from pleasing, and without any apparent motive.

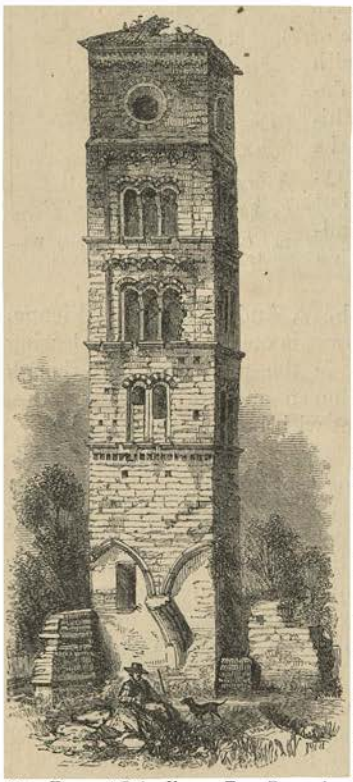
At Planes is another church whose plan deserves to be quoted, if not for its merit, at least for its singularity; it is a triangle with an apse attached to each side, and supporting a circular part terminating in a plain roof. As a constructive puzzle it is curious, but it is doubtful how far any legitimate use could be made of such a *capriccio*.



480. Plan of Church at Planes. From Taylor and Nodier.

There is, so far as I know, only one triapsal church, that of St. Croix at Mont Majour near Arles. Built as a sepulchral chapel, it is a singularly gloomy but appropriate erection; but it is too tall and too bare to rank high as a building even for such a purpose.

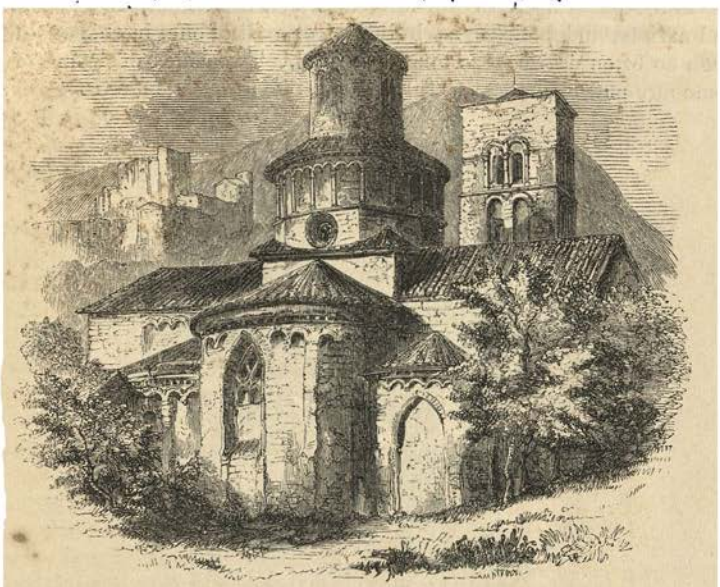
Provence is far from being rich in towers, which never seem there to have been favourite forms of architectural display. That of St. André le Bas at Vienne has already been spoken of, but this at Puissalicon (woodcut No. 481) near Béziers is even more typical of the style, and standing as it now does in solitary grandeur among the ruins of the church once attached to it, has a dignity seldom possessed by such monuments. In style it resembles the towers of Italy more than any found farther North, but is not without peculiarities that point to a different mode of elaborating this peculiar feature from anything found elsewhere. As a design its principal defect seems to be a want of lightness in the upper story. The single circular opening there is a mistake in a building gradually growing lighter towards its summit.



481. Tower at Puissalicon. From Renouvier.

These towers were never, or at least very seldom, attached symmetrically to the churches. When height was made an object, it was more frequently attained by carrying up the dome at the intersection of the choir with the nave. At Arles this is done by a heavy square tower, gradually diminishing, but still massive to the top; but in most instances the square becomes an octagon, and this again passes into a circle, which terminates the composition. One of the best specimens of this class of domes, if they may be so called, is the church

of Cruas (woodcut No. 482), where these parts are pleasingly subordinated, and form, with the apses on which they rest, a very beautiful composition. The defect is the tiled roofs or offsets at the junction of the various stories, which give an appearance of weakness, as if the upper parts could slide, like the joints of a telescope, one into the other.



482. Church at Cruas. From Taylor and Nodier.

This could easily be avoided, and probably was so in the original design. If this were done, we have here the principle of a more pleasing crowning member at an intersection than was afterwards used in pointed architecture, and capable of being applied to domes of any extent.

CLOISTERS.

Nearly all, and certainly all the more important churches of which we have been speaking, were collegiate, and with such the cloister was as important a part of the establishment as the church itself, and frequently the more beautiful object of the two. In our own cold wet climate the cloisters lose much of their appropriateness; still they always are used, and always with a pleasing effect; but in the warm sunny South their charm is increased tenfold. The artists seem to have felt this, and to have devoted a large share of their attention to these objects—creating in fact a new style of architecture for this special purpose.

With us the arcades of a cloister are generally, if not always, a range of unglazed windows, presenting the same features as those of the church, which, though beautiful when filled with glass, are somewhat out of place without that indispensable adjunct. In the South

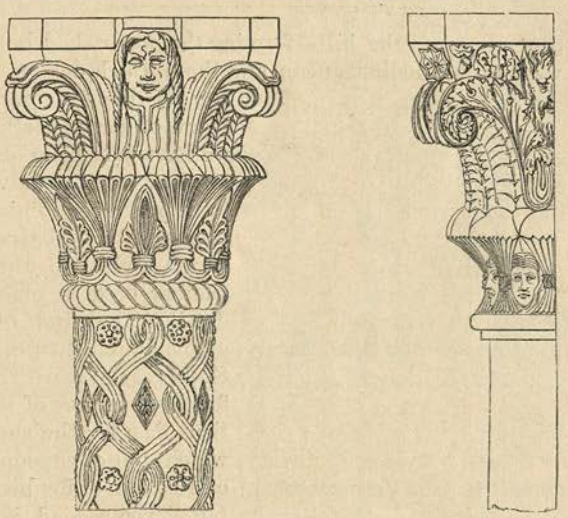
the cloister is never a window, or anything in the least approaching to it in design, but a range of small and elegant pillars, sometimes single, sometimes coupled, generally alternately so, and supporting arches of light and elegant design, all the features being of a character suited to the place where they are used, and to that only.

The cloister at Arles has long occupied the attention of travellers and artists, and perhaps no building, or part of one, in this style has been so often drawn or so much admired. Two sides of it are of the same age and in the same style as the porch (woodcut No. 474), and

483. Cloister at Fontifroide. From Taylor and Nodier.

equally beautiful. The other two are somewhat later, the columns supporting pointed instead of round arches. At Aix there is another, similar to this, and fragments of such colonnades are found in many places. That of Fontifroide (woodcut No. 483) is one of the most complete and perfect after that at Arles, and some of its capitals are treated with a freedom and boldness, and at the same time with an elegance, not often rivalled anywhere. They even excel—for the purpose at least—the German capitals of the same age. Those at Elne

are more curious than of any other cloister in France, so far as I know —some of them showing so distinct an imitation of Egyptian work as instantly to strike any one at all familiar with that style. Yet they are treated with a lightness and freedom so wholly mediæval as to show that it is possible to copy the spirit without a servile adherence to the form. Here, as in all the examples, every capital is different—the artists revelling in freedom from restraint, and sparing neither time nor pains. We find in these examples a delicacy of handling and refinement of feeling far more characteristic of the South than of the ruder North, and must admit that their architects have in these cloisters produced objects with which we have nothing of the kind in England to compete.



484. 485.

Capitals at Cloister, Elne. From Taylor and Nodier.

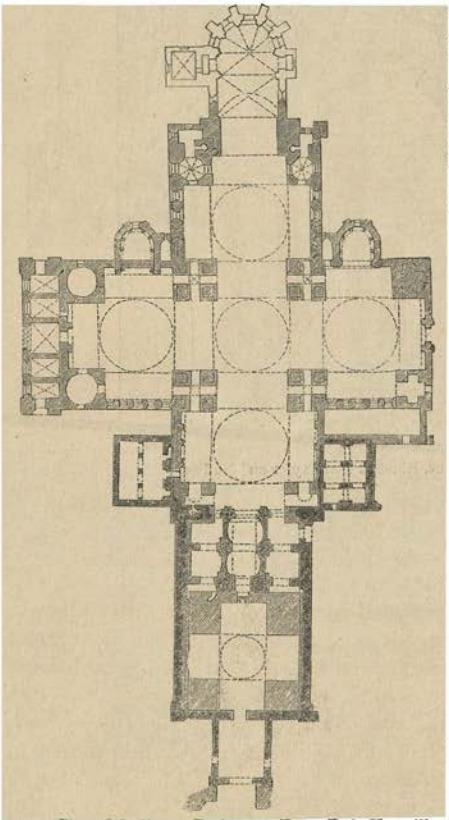
CHAPTER II.

AQUITANIA.

CONTENTS.

Churches at Perigeux, Souillac, Angoulême, Alby, Toulouse, Conques, Tours. — Tombs.

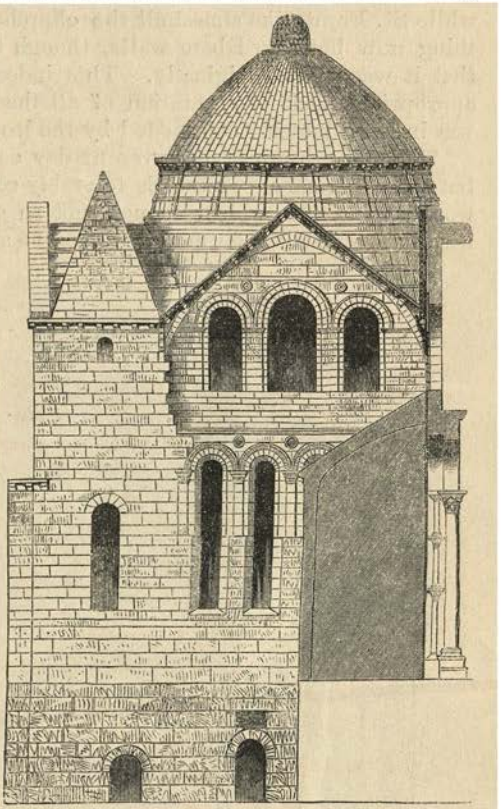
The moment you pass the hills forming the water-shed between the rivers flowing to the Mediterranean and those which debouch into the Bay of Biscay, you become aware of having left the style we have just been describing, to enter upon a new architectural province. This province possesses two distinct and separate styles, very unlike one another both in character and detail. The first of these is a round-arched tunnel-vaulted Gothic style, more remarkable for the grandeur of its conceptions than for the success with which those conceptions are carried out, or for beauty of detail. The second is a pointed arched, dome-roofed style peculiar to the province, and indicating the presence of an Eastern people, who, if this be the case, can be no other than the Basques. They certainly formerly did, and now do, inhabit a portion at least of the province, and have left their article *ac* affixed to the names of all the towns of importance where this style is found existing. Indeed, on the map, the prevalence of this termination exactly marks the limits and extent of the style. Domes are found, no doubt, farther north, but of a modified form. They are, however, sufficient to induce us to include



486. Plan of St. Front, Perigeux. From F. de Verneilh, Architecture Byzantine en France. Scale 100 ft. to 1 in.

for the present in the province of Aquitaine the doubtful districts of the Angoumois and Vendée, though it is possible that they may eventually turn out to belong more properly to Anjou.

In describing them, it may be convenient to take the domical style first, as its history—with one or two exceptional examples in the neighbouring provinces—begins and ends here. It will, no doubt, be found beyond the Pyrenees as soon as it is looked for; but in that terra incognita of Spain, fifty different styles might exist without our so much as knowing the fact of their being there.



487. Part of St. Front, Perigeux. From Verneilh.

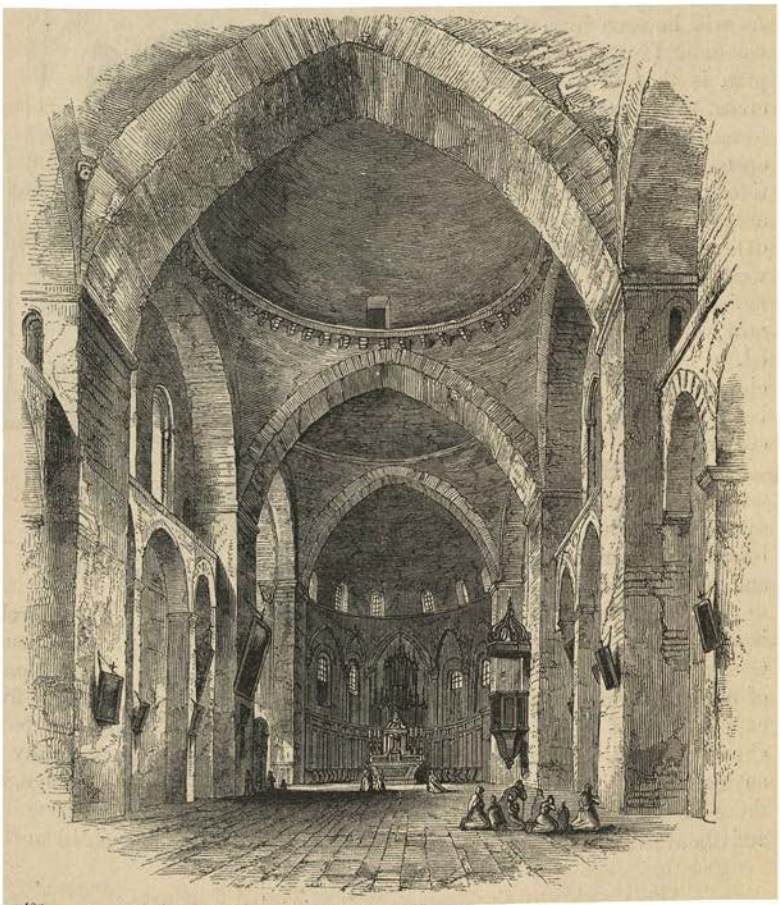
The principal and best preserved example of the domical style of Aquitaine is the church of St. Front, Perigeux. As will be seen from the woodcut (No. 486), its plan is that of a Greek cross, 182 ft. each way internally, exclusive of the apse, which is comparatively modern, and of the ante-church and porch extending 150 ft. farther west, which are the remains of an older church, now very much destroyed, to which the domical church seems to have been added in the 11th century.

Both in plan and dimensions, it will be observed that this church bears an extraordinary and striking resemblance to that of St. Mark's, Venice, illustrated further on. The latter church, however, has the angles filled up so as to make it into the more usual Greek form of a square, and its front and lateral porches are additions, of a magnificence to which this church can lay no claim. The five cupolas are of nearly the same size, and similarly placed, in both churches; and the general similarity of arrangement points certainly to an identity of origin. Both too seem to be of about the same age, as there is no reason to doubt the data on which M. Felix de Verneilh[1] arrives at the conclusion that the church we now see was erected in the

[1] Journal Archéologique de M. Didron, vol. xi. p. 88 *et seq.*

very beginning of the 11th century. There is, however, one striking difference, that all the constructive arches in St. Front are pointed, those of St. Mark's are round. The form too of the cupolas differs; and in St. Front the piers that support the domes having been found too weak have been cased to strengthen them, which gives them an awkward appearance not found in St. Mark's. The difference that would strike a traveller most is, that St. Mark's retains its frescos and decorations, while St. Front, like almost all the churches of its age, presents nothing now but naked bare walls, though there cannot be a doubt but that it was painted originally. This indeed was the legitimate and appropriate mode of decoration of all the churches of this age, till it was in great measure superseded by the invention of painted glass.

The cupolas are at the present day covered with a wooden roof; but their original appearance is tolerably correctly represented in the woodcut No. 487, which, though not so graceful as Eastern domes usually are, is still a far more picturesque and permanent finishing for



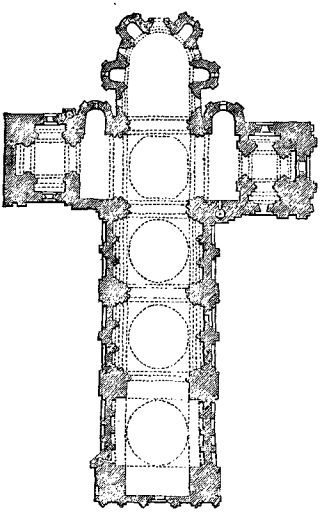
488. Interior of Church at Souillac. From Taylor and Nodier.

a roof than the wooden structures of the more Northern races. Its present internal appearance, from the causes above mentioned, is singularly bare and gloomy, and no doubt utterly unworthy of its pristine splendour.

The tower stands at the intersection between the old and new churches, and its lower part at least is so classical in its details, that it more probably belongs to the older Latin church than to the domical one. Its upper part seems to have been added, and its foundation strengthened, at the time of the building of the eastern part.

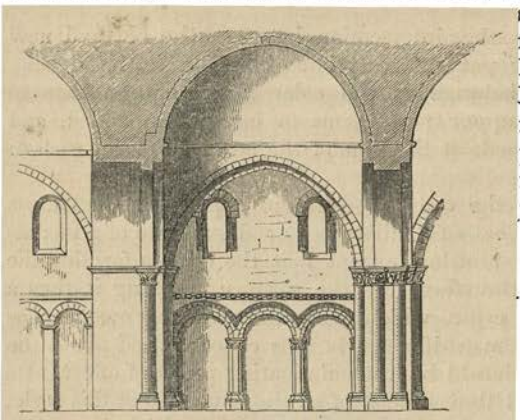
St. Front is perhaps the only specimen of a perfect Greek cross church with cupolas. That of Souillac is a good example of a modification of a form nearly similar, except that the cupola forming the eastern branch is here transferred to the western, making it thus a Latin instead of a Greek cross, which is certainly an improvement, as the principal space and magnificence is thus concentrated about the high altar, which is, or should be, the culminating point of effect. Its internal appearance, and that indeed of all the churches of this style, may be judged of from the view (woodcut No. 488), which in reality looks much more like the interior of a mosque in Cairo than that of a Christian church of the middle ages. The building is not large, being only 205 ft. in length internally, including the porch, and 110 across the transepts. Its age is not accurately known, antiquarians having insisted on placing it in the 12th century on account of its pointed arches, whereas my own impression is that it certainly belongs to the 11th century.

The cathedral at Angoulême (woodcut No. 489) is another and still more extended example of this class, having three domes in the nave, the first with the façade belonging certainly to the 11th, the rest to the 12th century. The form of these domes, with the arrangement of the side walls, will be understood from the woodcut No. 490. This method may be considered as typical of all this class of churches; and except in the mode of lighting the upper part, is by no means inferior in architectural effect to the intersecting vaults of after ages. The transepts here are shortened internally, so as only to give room for two small lateral chapels; but externally they are made very imposing by the addition of two towers, one at the end of each. This was another means of solving a difficulty that everywhere met the Mediæval architects, of giving the greatest dignity to the most holy place. The proper and obvious mode of doing this was of course to

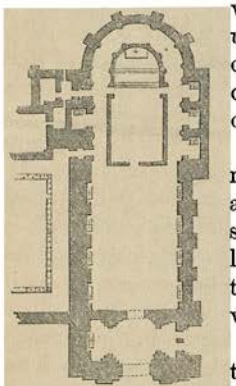


489. Plan of Cathedral at Angoulême. From Verneilh. Scale 100 ft. to 1 in.

raise a tower or dome at the intersection of the navê and transepts, but the difficulties of construction involved in this mode of proceeding were such that they seldom were enabled to carry it out. This can only be said, indeed, to have been fairly accomplished in England. At Angoulême, as will be observed in the plan, there is no passage round the altar, nor is the choir separated from the body of the church. In Italy, and indeed in Germany, this does not seem to have been considered of importance; but in France, as we shall presently see, it was considered the most indispensable part of the arrangement of the church, and to meet this exigency the architects were afterwards obliged to invent a mode of isolating the choir, by carrying a lofty stone railing or screen round it, wholly independent of any of the constructive parts of the church. This, there is little doubt, was a mistake, and in every respect a less beautiful arrangement than that adopted in the North; still it seems to have been the only mode of meeting the difficulty in the absence of aisles, and in some instances the richness with which the screen was ornamented, and the unbroken succession of bassi-relievi and sculptural ornaments, make us forget that it is only a piece of church furniture, instead of being an integral part of the design of the building.



490. One Bay of Nave, Angoulême. From Verneilh. No scale.



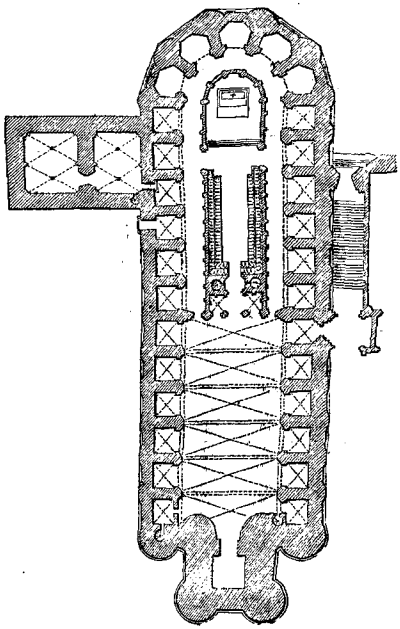
491. Plan of Church at Moissac. From Taylor and Nodier. Scale 100 ft. to 1 in.

One of the earliest examples of this arrangement which has been preserved is in the church at Moissac, remarkable for its strange mythical sculpture and rude pointed architecture, both belonging to the 11th century, and as unlike anything to be found in any other part of France as can well be conceived.

At a later age we find in the cathedral at Alby the same system carried to its acmé, and still adhered to in all essential parts in spite of the influence and predominance of the pure Gothic styles, which had then so generally superseded it. The foundation of the church was laid only in the year 1282, and it was not so far completed as to admit of its dedication till 1476. Its choir and fresco decorations were added by the celebrated Louis d'Amboise, who completed the whole in 1512. As will be seen from the plan (woodcut No. 492), the church is one immense unbroken vaulted hall, 55 ft. in

width by 262 in length; or adding the chapels, the internal width is 82 ft., and the total length upwards of 300 ft.

As will be observed, the whole of the buttresses are internal, as is very generally the case in the South. Where painted glass is not used, and fresco painting is the principal mode of decoration, such a system has many advantages. The outer walls are scarcely ever seen. Great internal extent and an appearance of gigantic strength are imparted, and the whole space covered by the building is available for internal use. But where painted glass is the principal mode of decoration, as was the case to the north of the Loire, such a system was evidently inadmissible. The walls were internally kept as flat as possible, so as to allow the windows to be seen in every direction, and all the mechanical expedients were put outside. Admirably as the Northern architects managed all this, I cannot help thinking, if we leave the painted glass out of the question, that the Southern architects had hit on the more artistic arrangement of the two; and where, as at Alby, the lower parts of the recesses between the internal buttresses were occupied with deep windowless chapels, and the upper lights were almost wholly concealed, the result was an extraordinary appearance of repose and mysterious gloom. This character, added to its simplicity and the vastness of its vault, render Alby one of the most impressive churches in France, and a most instructive study to the philosophical inquirer into the principles of effect, as being a Gothic church built on principles not only dissimilar from, but almost diametrically opposed to those which we have usually been accustomed to consider as indispensable and inherent requisites of the style.



492. Plan of Cathedral at Alby. From Chapuy, Cathédrales Françaises. Scale 100 ft. to 1 in.

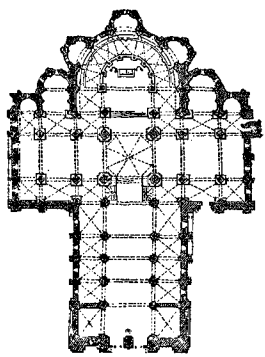
Besides those which are built wholly according to this plan, there are a great number of churches in this province which show its influence in more respects than one, though, having been rebuilt in a subsequent age, many of the original features are necessarily lost. The cathedral at Bordeaux is a remarkable example of this, its western portion being a vast nave without aisles, 60 ft. wide internally, and nearly 200 ft. in length. Its foundations show that, like that at Angoulême, it was originally roofed by three great domes; but being rebuilt in the 13th century, it is now covered by an intersecting vault of that age, with two stories of windows, and an immense array of flying but-

tresses to support its thrust, which all might have been dispensed with had the architects retained the original simpler and more beautiful form of roof. The cathedral of Toulouse shows the same peculiarity of a wide aisleless nave, leading to a choir of the usual construction of those of the 13th and 14th centuries in this country; and many other examples might be quoted where the influence of the earlier style peers through the Northern Gothic which succeeded and nearly obliterated it.

The Gothic churches of this province are neither so numerous nor so remarkable as those of the domical class we have just been describing; still there are several examples, far too important to be passed over, and which will serve besides to enable us to introduce the new form of church building which became prevalent in France, to the exclusion of all others, and indeed characteristic of the French style as contradistinguished from those of other countries.

The typical example of the style in this province is the great church of St. Saturnin, or St. Sernin, at Toulouse, dedicated in the year 1096. This church, though one of the finest and most interesting in France, has neither been drawn nor accurately described. The church, however, of Conques is of the same age and style, and though far inferior in size, will serve to explain the peculiarities of plan to which I have just alluded.

The nave, as will be observed (woodcut No. 493), has side aisles, above which runs a grand gallery. The roof of this gallery—in section the quadrant of a circle—forms an abutment to the roof of the nave, which is a bold tunnel vault ornamented by transverse ribs only. So far the constructive arrangements are the same as in the transitional church of Fontifroide, quoted above (p. 605). Passing from the nave to the choir, we come upon a more extended and complicated arrangement than we have hitherto met with. It will be recollected that the Romanesque apse was a simple large niche, or semi-dome; so it was in the Lombard and German styles described above, and generally even in the neighbouring Provençal style, and always—when unaltered—in the domical style last described. In the present instance it will be seen that a semicircular range of columns is substituted for the wall of the apse, an aisle bent round them, and beyond the aisle there are always three, five, or even seven chapels opening into it, which give it a complexity very different from the simple apse of the Roman basilicas and the other styles we have been describing, and at the same time a variety of perspective and a play of light and shade which are unrivalled in any similar invention of the middle ages. The apse, properly speaking, is a solid semi-cylinder, surmounted by a semi-dome, but always solid below, though generally broken by windows above. The *chevet* on the contrary is an apse, always enclosed

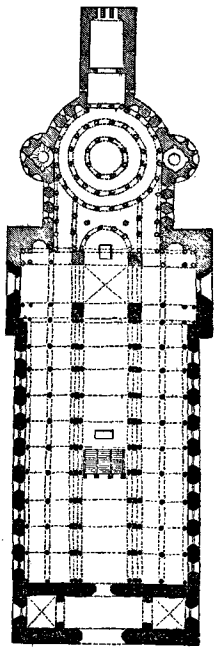


493. Plan of Church at Conques. From Taylor and Nodier. Scale 100 ft. to 1 in.

by an open screen of columns on the ground-floor, and opening into an aisle, which again always opens into three or more apsidal chapels. This arrangement is so peculiarly French, that it may properly be characterised by the above French word, a name once commonly applied to it, though latterly it has given way to the more classical, but certainly less suitable term of apse. Its origin too is worth inquiring into, and seems to be capable of easy explanation.

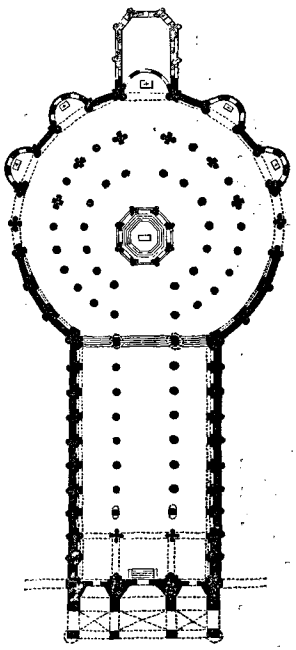
The uses which the various nations of Christendom made of the circular form of building left them by the Romans have been more than once adverted to above. The Italians used it almost always standing alone as a tomb-house or as a baptistery: the Germans converted it into a western apse, while sometimes, as in the example at Bonn (woodcut No. 436), they timidly added a nave to it; but the far more frequent practice with the Germans, and also in England, was to build first the round church for its own sake, as in Italy: then the clergy for their own accommodation added a choir, that they might pray apart from the people.

The French took a different course from all these. They built round churches like other nations, apparently, in early times at least, intended to stand by themselves; but in no instance do they appear to have applied them as naves, nor to have added choirs to them. On the contrary, the clergy always retained the circular building as the sacred depository of the tomb or relic, the Holy of Holies, and added a straight-lined nave for the people. Of this class was evidently the church which Perpetuus built in the 5th century over the grave of St. Martin at Tours. There the shrine was surrounded by 79 pillars arranged in a circular form: the nave was lined by 41,—20 on each side, with one in the centre of the west end, as in Germany. But more interesting, because more certain than this, is the church of St. Benigne, at Dijon, built undoubtedly in the first years of the 11th century, and pulled down only at the Revolution. It had been previously carefully measured and described in Dom Plancher's History of Burgundy. As seen by him, the foundations only of the nave were of the original structure, for in the year 1271 one of its towers fell, and so damaged it that the whole of that part of the church was then rebuilt in the perfect pointed style of that day. Without entering too much into detail, it will suffice to state that the part shaded dark in the woodcut (No. 494) is taken literally from Dom Plancher's plan, regarding which there can be no doubt, and the contemporary descriptions are so full that very little uncertainty can exist regarding the dimensions and general disposition of the nave.

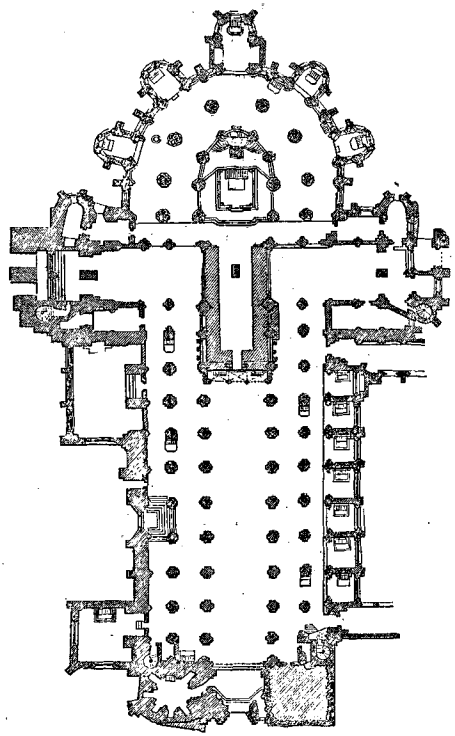


494. Plan of St. Benigne, Dijon. From Dom Plancher's Histoire de Bourgogne. Scale 100 ft. to 1 in.

The bodies of the confessors, SS. Urban and Gregory, were, it appears, originally buried in the church of St. John the Baptist, which seems to have been the name most properly applied to this circular building; they were afterwards transferred to the crypt below the high altar, in the rectangular part of the church. Above the lower story, which retained its name as a baptistery and burial place, the upper church was dedicated to the Virgin Mary; above that was the church of the Holy Trinity; and on the top of the round towers, on one side, as in the St. Gall plan (p. 556), the altar of St. Michael, on the other probably of Gabriel.



495. Church of Charroux.
Scale 100 ft. to 1 in.



496. Plan of St. Martin at Tours.
Scale 100 ft. to 1 in.

Another church of the same class, though of a later age, and of which enough still remains to enable us to trace with certainty its plan, is that of Charroux on the Loire, which shows in perfection the arrangement described, and it required only one step further to bring the system to its complete state. This, it will be seen, was very nearly accomplished in the rebuilding of the church of St. Martin at Tours in the 12th century. The architect was still somewhat hampered by feeling himself obliged to follow the outline of the old basilica of Perpetuus, and to build on its foundation so as not to disturb either the shrine of the saint, or any places considered holy; but still he has very

nearly perfected the arrangement of the *chevet*, by omitting half the circle or nearly so, and commencing the walls of the nave from its tangents. This is done in all its details in the church of Conques, described above, where, tied down by no previous building, the architect was allowed free scope for his design. The plan so produced was never lost sight of by the French, but was developed into a vast variety of beautiful forms, which we shall shortly have to examine.

When once this transformation of the round church into the chevet termination of a basilica was effected, the French adhered to it with singular constancy. I am not aware of their ever having built a circular church afterwards intended to stand alone; and there are very few instances of basilicas of any importance without this form of apse. Some, it is true, have been rebuilt on old foundations, with square eastern ends, but this is rare and exceptional, the chevet being the true and typical termination.

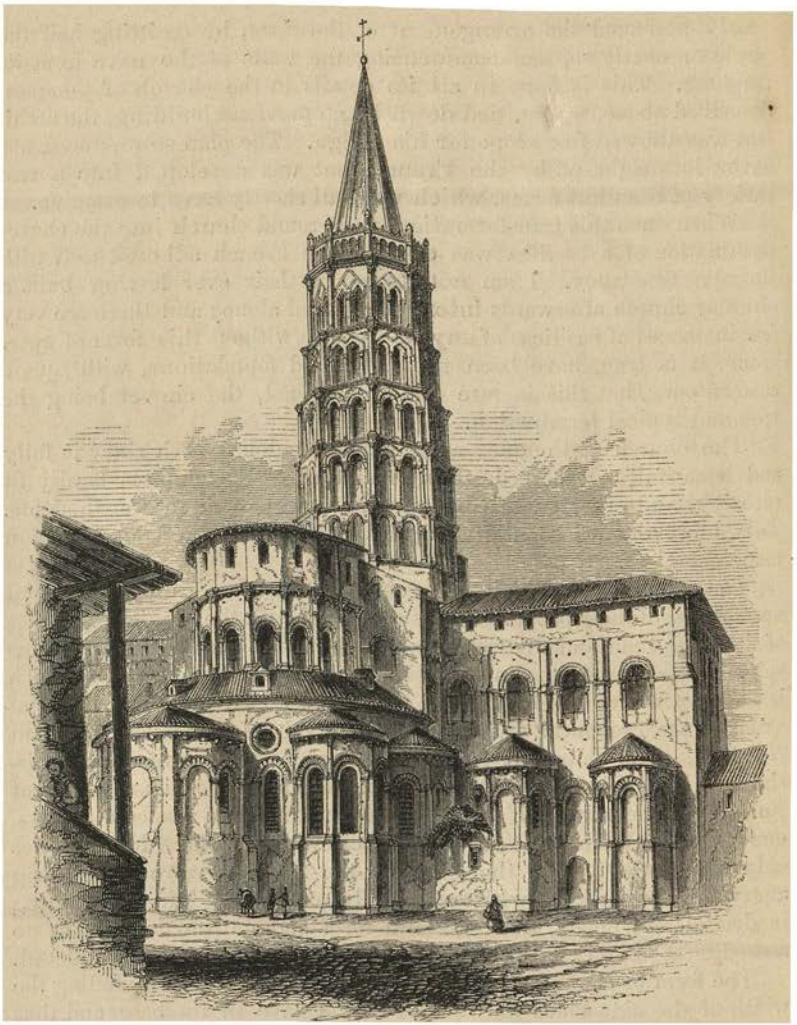
The church at Conques and that of Toulouse both show it fully and beautifully developed, though externally the chapels hardly fit pleasingly into the general design, and look more as if after-thoughts. This, however, was soon afterwards remedied, and the transformation made complete.

The solidity with which these churches were built, and the general narrowness of their proportions as compared with the domical churches of the same time and district, enabled the architects to attempt some splendid erection on the intersection of the nave and transepts, which is the spot where height should always be aimed at. The dome at Cruas in the Provençal district has already been described (woodcut No. 482). The church at Conques has one as important, though dissimilar; but the finest is that of St. Sernin at Toulouse (woodcut No. 497), which rivals, if indeed it does not in some respects surpass, our spires at Salisbury, Norwich, and elsewhere. The 3 lower stories only are of the age of the church; the 2 upper were added long afterwards, but adapted with remarkably good taste. Though differing in design and detail, their general form and outline is such as to accord most happily with the older structure on which they are placed.

The form of the spire being octagonal admits of its including the width of the side aisles as well as of the nave in its base, and thus gaining that breadth in which all pointed Gothic spires of this class are so deficient, and which was only attained in the domes of the Renaissance, and then at the expense both of truthfulness of construction, and by concealed mechanical expedients that almost certainly ensure their early destruction.

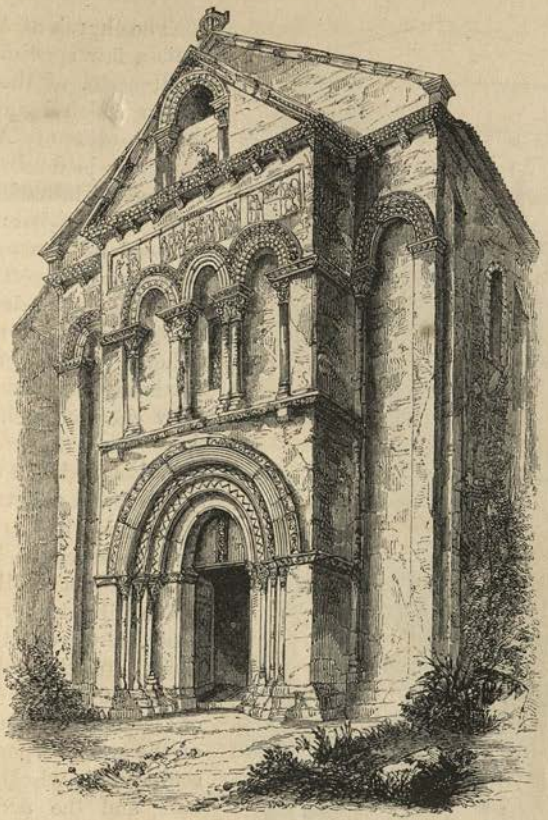
In this example there is a sameness of design in placing so many similar stories one over the other, merely diminishing in size. The general effect, however, is good, and for a central object it is, if not the finest, certainly one of the very best which France possesses.

As in all French styles, the western façades were the parts on which the architects lavished their ornaments with the most unsparing hand. Generally they were flat, and most of them now terminate squarely, with a flat line of cornice of slight projection. Beneath



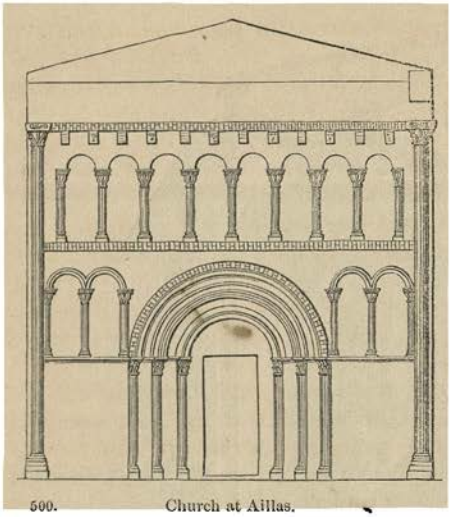
497. St. Sernin, Toulouse. From Taylor and Nodier.

this there generally is a range of arches filled with sculpture or intended to be so—the central one, and that only, being used as a window. Beneath this is the great portal, on which more ornament is bestowed than on any other feature of the building. Some of these gateways in this province, as in Provence, are wondrous examples of patient labour, as well as models of beauty. They possess more than the richness of our own contemporary Norman portals, with a degree of refinement and delicacy which our forefathers did not attain till a much later age. Some of these church-portals in Aquitaine are comparatively simple, but even they make up for the want of sculpture by the propriety of their design and the elegance of their composition.

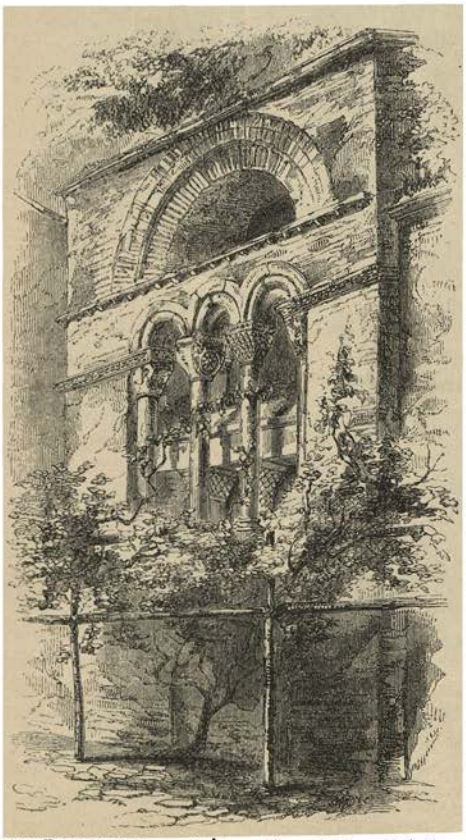


498. Church at Loupiac. From Leo Drouyn, Architecture au Moyen Age.

499. St. Eloi, Espalion. From Taylor and Nodier.



500. Church at Aillas.



501. Tomb at St. Pierre, Toulouse. From Taylor and Nodier.

The church at Aillas presents a fair specimen, on a small scale, of the class of design which is peculiar to the façades of Aquitania, though it is doubtful if the original termination of the gable has not been lost and replaced by the one shown in the drawing. The façade of Angoulême is designed on the same plan, though much richer. Those of Civray, Parthenay, and many others, show the same characteristics. They appear to have been designed, not to express the form and construction of the interior, but as a vehicle for a most extensive series of sculptures exhibiting the whole Bible history. Sometimes, however, the design is more strictly architectural, as in the façade of the church of Loupiac (woodcut No. 498, on the previous page), where sculpture is wholly subordinate, and the architectural members are so grouped as to form a pleasing and effective design, not unlike some to be found farther north and in our own country.

The varieties of these, however, are so endless that it would be in vain to attempt either to particularize or describe them. Many of these arrangements are unusual, though almost always pleasing, as in the church at Espalion (woodcut No. 499), where the belfry is erected as a single wall over the chancel-arch, and groups well with the apsidal termination, though, as in almost all instances in this

country, the western façade wants feature and character sufficient to balance it.

Generally speaking, the cloisters and other ecclesiastical adjuncts are so similar to those of Provence, described in the last chapter, that a separate description of them is not needed here. They are all of the columnar style, supporting small arches on elegant capitals of the most varied and elaborate designs, guided by the delicate feeling of the south, which prevented their running into the barbarism so common farther north when the architects attempted anything beyond the common range of richness.

The same feeling pervades the tombs, monuments, and domestic architecture of this part of France, making them well worthy of study in far more detail than has yet been attempted. The woodcut (No. 501) represents one small example of a tomb built into a wall behind the church of St. Pierre at Toulouse. It is one of those graceful little bits of architecture which meet one at every turn in the pleasant south, where the people have an innate feeling for art which displays itself in the smallest as well as in the most important works.

CHAPTER III.

ANJOU.

CONTENTS.

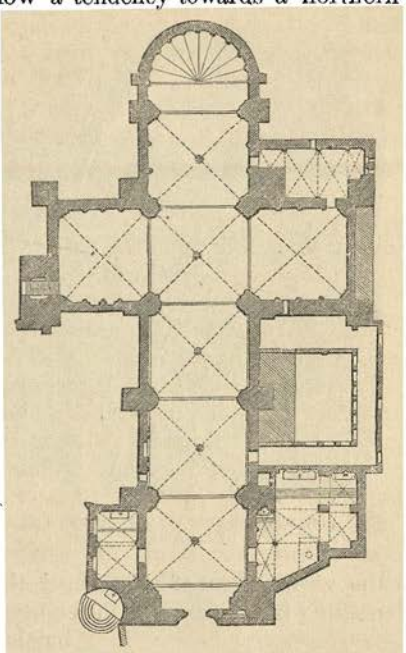
Cathedral at Angers — Church at Fontevrault — Poitiers — Spires.

The province of Anjou cannot perhaps be so distinctly defined as the two already described. On the north indeed it is separated by the clearest line both from Normandy and from the Frankish province. But in the south, as before remarked, it is not easy to say, in the present state of our knowledge, what belongs to Aquitaine and what to Anjou. Not that there is any want of sufficient marks of distinction between the *styles* themselves, but a large portion of *examples* appear to belong to a sort of debateable ground between the two. This, however, is true only of the buildings on the borders of the province. The two capitals of Angers and Poitou are full of examples such as could belong to no other province, and generally speaking the same remark applies to all the principal churches of the province.

The age of the greatest splendour of this province is from the accession of Foulques Nerra in the year 989 to the death of Henry II. of England, 1190. During these two centuries its prosperity and independent power rose to a height which it neither maintained afterwards nor ever regained. Before this time the buildings found scattered here and there are few and insignificant. During its continuance every town was enriched by some noble effort of the piety and architectural taste of the age. After its conclusion the completion of works previously commenced was all that was attempted. The rising power of the northern provinces, and of the English, seems to have given a check to the prosperity of Anjou, which it never thoroughly recovered; for when it did to a certain extent again become prosperous and wealthy, it was under the influence and dominion of the great central Frankish power which ultimately absorbed into itself all the separate nationalities of France, and obliterated those individualities which are so strikingly prominent in the earlier part of her history.

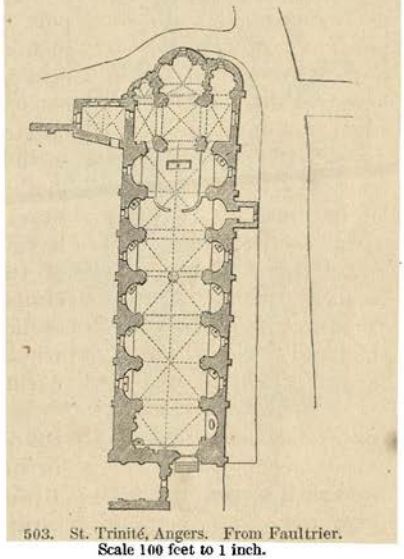
The plan of St. Maurice (woodcut No. 502), the cathedral of Angers, may be considered as a typical example of the Angiovine style, and will serve to explain in what it differs from the northern or resembles the southern styles. On comparing it with the plan of Souillac, and more especially with that of the cathedral at Angoulême, it will be seen how nearly it resembles them—the great difference being that, instead of cupolas over each square compartment, it has the intersecting vault of the northern styles. Its buttresses too are external, but less in pro-

jection than might almost be supposed necessary to support a vault 52 ft. in span. These certainly show a tendency towards a northern style of construction; but the absence of free standing pillars or of aisles, and the general arrangement of the whole building, are rather southern peculiarities. Externally its façade has been successively piled up at various times from the 12th century, when the body of the church was commenced and nearly finished, to the 16th, when it was completed in the style of the Renaissance.



502. Cathedral at Angers. From Faultrier, Anjou et ses Monumens. Scale 100 feet to 1 inch.

Another church in the same city, of equal interest, though not so large or important, is that of the Trinité. It consists of one nave without transepts, 52 ft. wide, measuring into the recesses, though only 32 ft. wide between the piers. It is roofed with an intersecting vault in 8 compartments, of somewhat northern pattern, but with a strong tendency towards the domical forms of the southern style, and possessing a peculiarity rather frequently attempted, of trying to attain greater appearance of length by lowering the vaults from the entrance towards the altar. Thus at the entrance it is 80 ft. in height, but gradually sinks to 65 at the eastern end. This contrivance is a mere trick, and, like all such in architecture, a failure.

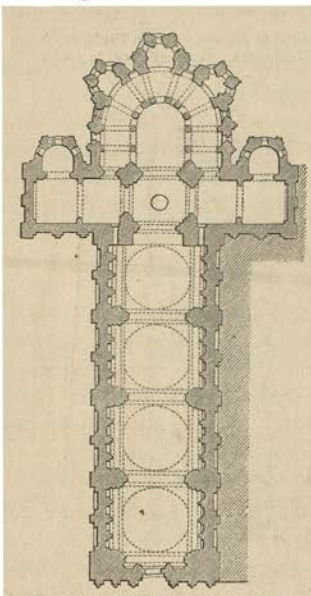


503. St. Trinité, Angers. From Faultrier. Scale 100 feet to 1 inch.

The details of this church are rich and good throughout, and altogether the effect of the 7 recesses on each side is pleasing and satisfactory. Indeed it may be considered as the typical and best example of that class of churches, of which a later specimen was the cathedral at Alby, described in the last chapter, and which are so beautiful as to go far to shake our absolute faith in the dogma that aisles are indispensably necessary for the proper effect of a Gothic church.

Even more interesting than either of these, in an archæological point of view, is the little castle chapel at Loches, commenced by Geoffrey Grise Gonelle, Count of Anjou, in the year 962; it was continued by his son, Foulques Nerra, to whom the nave must be ascribed; while the western tower is probably the only part now remaining of the older church. The eastern portion was rebuilt in the 12th century by Thomas Pactius, the prior, and completed in 1180—the latter part being in the well-known Norman style of that age. An interesting point in this church is that the Norman round-arch style is built over and upon the pointed arches of the nave, which are at least a century older, having been erected between the years 987 and 1040. It will be seen from the view given of this chapel that the pointed style here used has nothing in common with the pointed architecture of the north of France, but is that of the south, such as we have seen in the churches of Perigeux and Souillac. It is used here, as there, to support domes. These, however, in this instance, instead of being circular, are octagonal, and rise externally in octagonal cones of stone-work, giving a very peculiar but interesting and elegant outline to the building. They also point out a method by which roofs at least as high as those which afterwards prevailed could have been obtained in stone if this mode of vaulting had been persevered in. The church of St. Sergius at Angers has pointed arches, certainly of an early date, but whether so old as this or not is not quite certain.

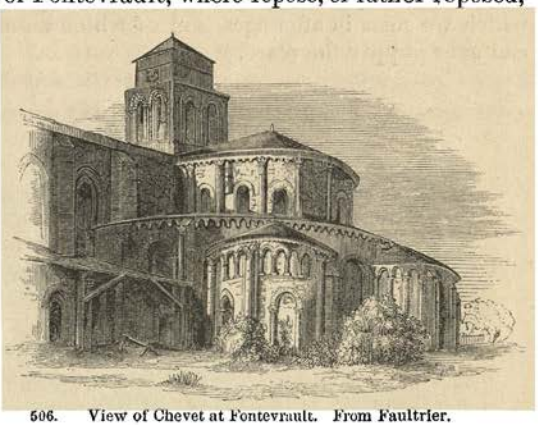
504. View of the Interior of Loches. From a Sketch by the Author.



505. Plan of Church at Fontevrault. From Verneilh. Scale 100 feet to 1 inch.

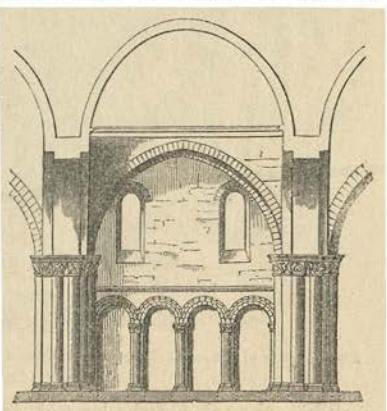
It has already been suggested that all round churches were originally sepulchral or intended to be so. There can also be little doubt but that the halves of round churches, which, as explained above, were adopted as the chevet termination of French basilicas, were also intended either to symbolize a tomb-house or relic-shrine, or actually to serve as the sepul-

chres of distinguished personages. This certainly appears to have been the case in the earlier French examples, and among these one of the most splendid in this province, indeed almost the only one of any real importance, is that of Fontevrault, where repose, or rather reposed, the remains of two of our Plantagenet kings, Henry II. and Richard I., with others of their family. As will be seen from the woodcut (No. 506), it is a mausoleum worthy of them, and a pleasing example of the style of the age, and though certainly not so peculiarly Angiovine as the apsidal churches of Angers and Poitiers, has still distinguishing characteristics which are not found in any other province of France. The nave is surmounted by 4 domes, as is usual in this and the more southern provinces. It is only in having an aisle trending round the apse that it differs from the ordinary churches. It may be seen from the plan how awkwardly this is done, and how ill its narrow dimensions agree with the spaciousness of the nave.



506. View of Chevet at Fontevrault. From Faultrier.

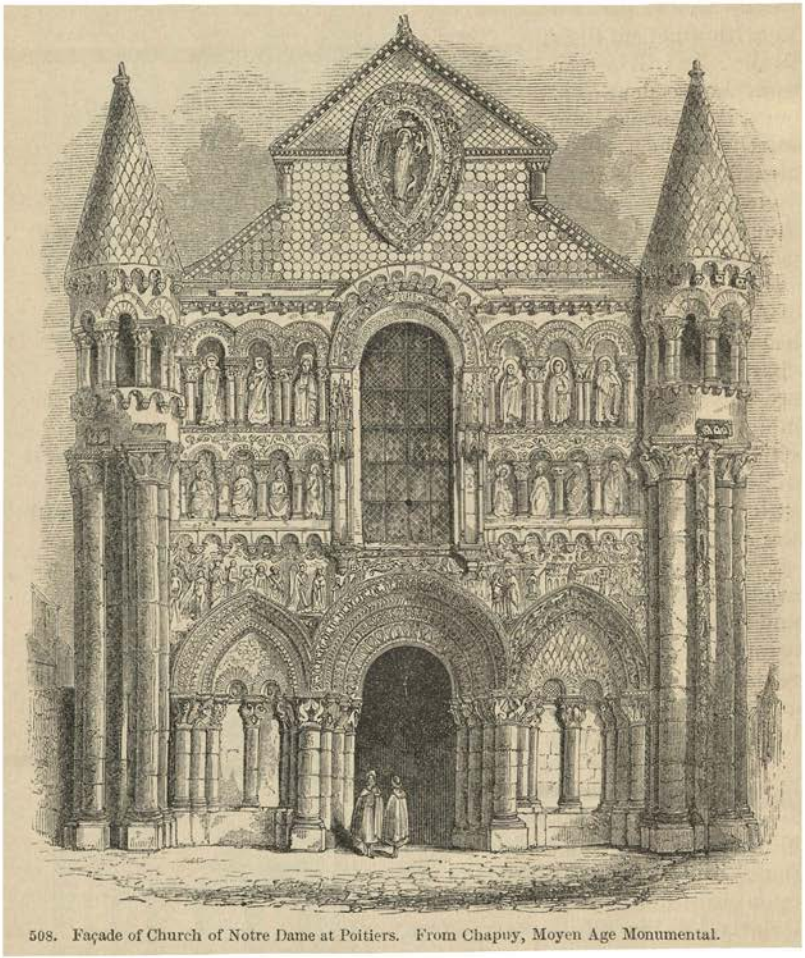
Woodcut No. 507 demonstrates how similar the domes of its nave are to those of Angoulême, Souillac, and those of the south—this domical arrangement being in fact as characteristic of this age and locality as the intersecting vault afterwards became of the northern provinces.



507. Elevation of one of the Bays of the Nave at Fontevrault. From Verneilh.

If the apse or chevet of this church is not so strictly Angiovine as other examples, the façade of the church of Notre Dame de Poitiers (shown in woodcut No. 508) is not open to the same remark, being strictly local in all its parts. Originally the one window it possessed was circular, but in the 15th century, as may be seen from the mouldings then introduced, it was cut down to its present form, no doubt to make more room for painted glass, which at that age had superseded all other modes of decoration; whereas in the 12th century, to which the church belongs, external sculpture and internal mural paintings were the prevailing modes of architectural expression. As may be seen from the view, sculpture is

here used in a profusion of which no example belonging to a later age exists; and though we cannot help admiring the larger proportions and broader masses of subsequent builders, still there is a richness and a graphic power in the exuberant sculpture of the earlier façades which we miss in after-ages, and of which no mere masonic excellence can ever supply the place.



508. Façade of Church of Notre Dame at Poitiers. From Chapuy, Moyen Age Monumental.

This, though not the largest, is probably the best and richest of its class in this province. The border churches of Parthenay, Civray, and Ruffec, all show traces of the same style and the same forms more or less richly carried out; but none have the characteristic corner towers, nor do they retain their pedimented gable so perfect as Notre Dame at Poitiers.

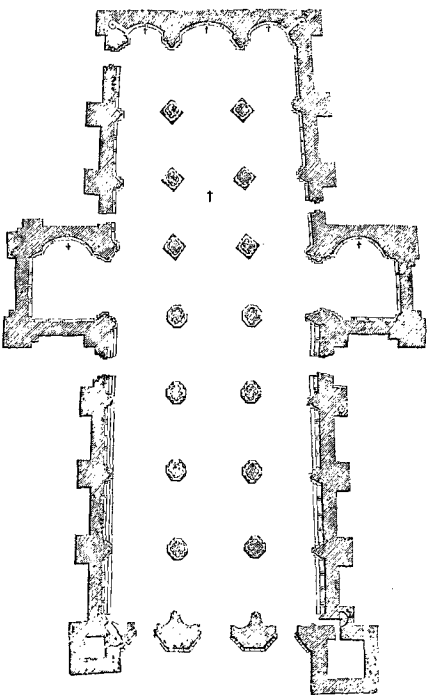
Besides this one there are four churches in Poitiers, all which were certainly erected in the 11th century, and the greater part of them

still retain unaltered the features of that age. The oldest, St. Hilaire (A.D. 1049), is remarkable for an irregularity of plan sufficient to puzzle all the antiquaries of the land, and only to be accounted for on the supposition of its being built on the foundation of some earlier church, which it has replaced.

Moutierneuf (1066) possesses in its nave a circular-headed tunnel-vault, ornamented with transverse ribs only, but resting on arches which cut slightly into it, without any string-course or plain wall, as is usual in the south, showing a tendency towards intersecting vaulting, indicative of an approach to the north.

The most remarkable parts of St. Porchaire and St. Radagonde are their western towers, which are fine specimens of their class, especially the latter, which changes pleasingly into an octagon before terminating in a short spire. Altogether this church shows that elegance of feeling the want of which is a chief defect of the contemporary Norman style.

The cathedral of Poitiers was founded in the year 1161. Its eastern end belongs to a transitional period, while its western front was not completed till the Pointed Gothic style had reached its utmost perfection, 200 years later. Its plan, however, probably belongs to the earlier period, and presents so strong a contrast to the northern churches of the same date that it may be quoted here as belonging to the style which we are describing. The east end is square externally, but internally contains 3 shallow niches like those on each side of St. Trinité at Angers. Its transepts are mere chapels; but its most remarkable feature is the convergence of its sides towards the east; and as its vault sinks also towards that end, a false perspective is attained, which certainly at first sight gives the church an appearance of greater length than it really possesses. The 3 aisles too, being of the same height, add to the effect of space; so that, taken as a whole, this church may be quoted as the best example known of the system of attaining a certain effect by these means, and is well worthy of study on this account. It, however, I



509. Plan of Cathedral at Poitiers. From Coulier's Histoire de la Cathédrale de Poitiers. Scale 100 ft. to 1 in.

think, admits of no doubt but that the Northern architects were right in rejecting all these devices, and basing their efforts on better understood and honester principles.

It is in this province that, proceeding from the south, spires are first found in common use. The characteristic of the south is the square flat-roofed tower or octagonal dome. In Anjou, towers standing by themselves, and crowned by well-proportioned spires, seem early to have been introduced, and to have been considered almost essential parts of church architecture. The representation (woodcut No. 510) of that attached to the interesting church of Cunault on the Loire is of the most common type. There is another at Chemille, almost exactly like it, and a third on the road between Tours and Loches, besides others differing only slightly from these in detail. They want the aspiring lightness afterwards attained in Gothic spires; but their design and ornaments are good, and their outlines well suited to the massive edifices to which they are attached.

510. Spire at Cunault. From Faultrier.

Most of the conventual buildings attached to these churches in this province have disappeared, either during the struggle with the Huguenots, or in the later and more disastrous troubles of the Revolution, so that there is scarcely a cloister or other similar edifice to be found in the province. One or two fragments however still exist, such as the Tour d'Evrault.[1] This is a conventual kitchen, not unlike that at Glastonbury, but of an earlier age, and so far different from anything else of the kind that it was long mistaken for a building of a very different class.

Another fragment, though probably not ecclesiastical, is the screen of arches recently discovered in the hôtel of the Préfecture at Angers. As a specimen of elaborate exuberance of barbarous ornament, it is unrivalled even in France, but is much more like the work of the Normans than anything in the neighbourhood. Owing to its having been so long built up, it still retains traces of the colouring with which all the internal sculptures, at least of this age, were adorned.

The deficiency in ecclesiastical buildings in this province is made up to a great measure by the extent and preservation of its Feudal re-

[1] This building is well illustrated in Turner's Domestic Architecture.

mains, few of the provinces of France having so many and such extensive fortified castles remaining. Those of Angers and Loches are two of the finest in France, and there are many others scarcely less magnificent. Few of them, however, have features strictly architectural; and though the artist and the poet may luxuriate on their crumbling time-stained towers and picturesque decay, they hardly belong to such a work as this, nor afford materials which would advance our knowledge of architecture as a fine art.

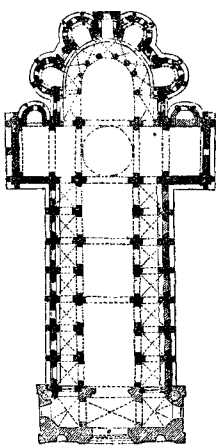
CHAPTER IV.

AUVERGNE.

CONTENTS.

Church at Issoire — Puy — Fortified church at Royat.

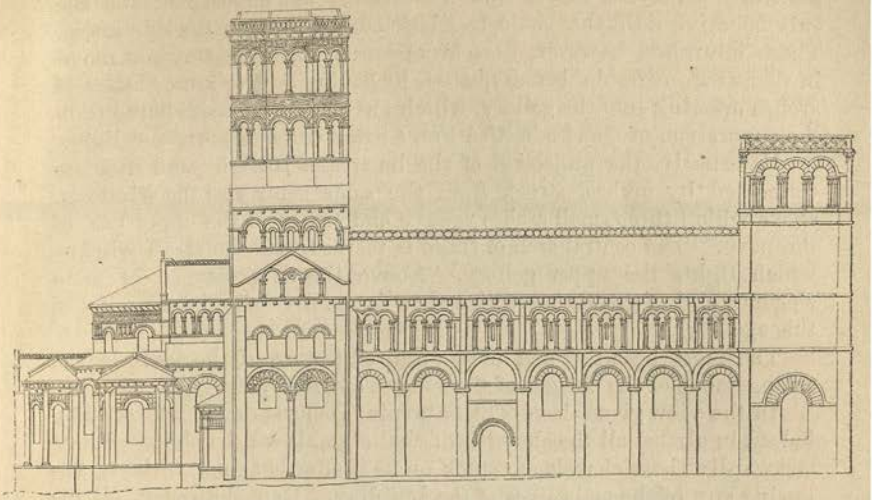
The last of the Southern provinces which requires to be distinguished is that of Auvergne, one of the most beautiful as well as one of the most complete of the round Gothic styles of France. The country in which it is found is as distinctly marked out as the style, for no naturalist can cross the frontier of the territory without at once being struck by the strange character of its scenery. It is a purely volcanic country, to which the recently extinguished craters impart a character not found in any other province of France. Whether its inhabitants are of a different race from their neighbours, has not yet been investigated. At all events, they retain their original characteristics less changed than any other people inhabiting the South of France. Their style of architecture is distinct, and early reached a degree of perfection which no other in France had then attained, and which has more resemblance than we have hitherto found in France to the Lombard and Rhenish architecture. The other styles of Southern France, whatever their beauties may be, certainly never attained to that degree of independent completeness which enables us to class that of Auvergne among the perfected styles of Europe.



511. Church at Issoire. From Mallay. Scale 100 ft. to 1 in.

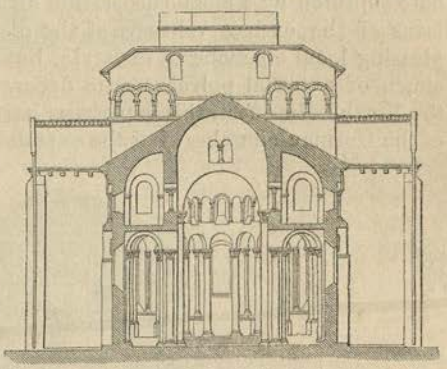
In the department of Puy de Dôme there are at least four churches of the typical form of this style, which have been edited by M. Mallay—those of Issoire, of N. D. du Port at Clermont, of Orcival, and of St. Nectaire—which only differ from one another in size, and in the arrangement of their apsidal chapels; that of Issoire having a square central chapel inserted which is wanting at Clermont and Orcival, while St. Nectaire has only three instead of four.

The largest of these is that of Issoire, of which a plan is here given, from which it will be seen that even it is small, though beautifully arranged. The transepts are just sufficiently developed to give expression to the exterior, and to separate the nave from the choir, which are beautifully proportioned to one another.



512. Elevation of Church at Issoire. From Mallay. Scale 50 feet to 1 inch.

They all possess central towers, raised on a mass of masonry extending to the whole width of the church, which gives them a breadth of base found in no other style. The want of this is painfully felt in most of our own central spires, all which need something more to stand upon than the central roof, out of which they seem to grow; but I do not know that the difficulty was ever attempted to be remedied anywhere but in Auvergne. They were intended to have western towers, the massive foundations for which are found in every example, though I believe that there is no instance in which these exist in a complete state.



513. Section of Church at Issoire, looking East. From Mallay. Scale 50 feet to 1 inch.

The side aisles are always covered by intersecting vaults, but that of the nave is always a simple tunnel vault, as in the Southern styles, ornamented by occasional transverse ribs, and in the church at Issoire slightly pointed.

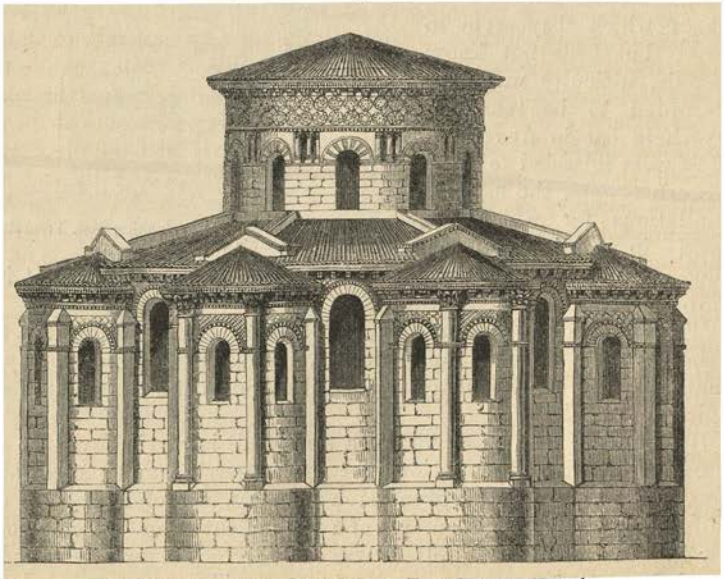
To support this great vault, a semi-vault is carried over the side aisles—as shown in the section—forming a massive and perfect abutment to the thrust of the great arch; besides, as before pointed out, rendering the vault independent of a wooden covering, which, though now in some instances supplied, was certainly not originally intended. The defect of this arrangement is of course evident, as compared with

the Northern styles, inasmuch as a clerestory was impossible, and the only effective light that could be admitted was through the side aisles. These churches, however, have an approach to a clerestory not found in that at Fontifroide, before quoted, in having a triforium or range of arches opening into the gallery, which gave a lightness of character to the superstructure, and admitted to a certain extent a borrowed light.

Externally, the projection of the buttresses is slight, and they are connected by arches, struck from the same centres as the windows, above which three small arches relieve and ornament the upper part of the nave. The central arch of these is pierced with the small window which lights the upper gallery. Above this is a cornice of more elegance and of greater projection than is usually found in churches of this age.

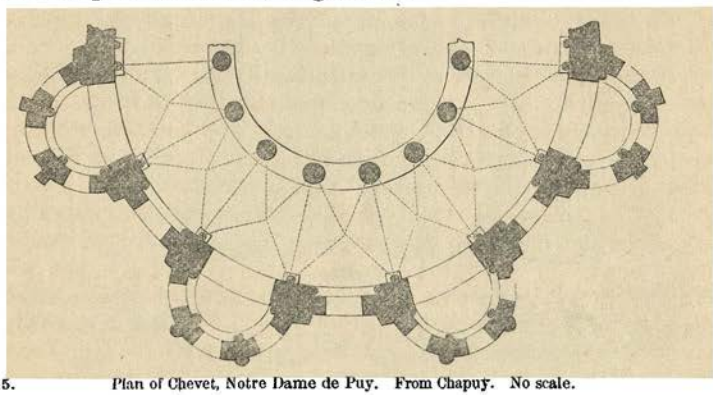
The most beautiful and most admired feature of the style is the arrangement of the chapels of the chevet externally.

In the view given above of St. Saturnin, Toulouse (woodcut No. 497), indeed in almost all the churches of that style, it will be observed how awkwardly these chapels are stuck on as if afterthoughts, without following any of the main lines of the building. Here, however, all the parts are pleasingly subordinated one to the other, and the whole so grouped as to form a design equal, if not superior, to the galleried apses of the German and Lombard churches. The place of these galleries is here supplied by a mosaic decoration formed with the different coloured lavas of the extinct volcanos of the district, which gives not only a pleasing local character to the style, but is interesting as the only specimen of external polychromatic decoration now to be found so far to the North. In effect, this is perhaps hardly equal to the open galleries of the German churches; but the expense must have been considerably



514. Elevation of Chevet, Notre Dame de Puy. From Chapuy. No scale.

less, and the variety of the outline of the chevet arrangement, as compared with the simple apse, gives to these churches some advantages over the contemporary buildings on the Rhine. Indeed, as far as external decoration is concerned, it may be questioned whether the French ever surpassed these; and were they carried out on the same scale as those of Amiens and Chartres, I am convinced they would be thought more beautiful. It is true the flying buttresses and pinnacles of the pointed style enabled the architects to introduce far larger windows and gorgeous decorations of painted glass, and so to improve the internal effect of their churches to an immense extent; but this was done at the sacrifice of much external simplicity of outline and propriety of effect, which we cannot but lament could not be reconciled with the requisite internal arrangements.

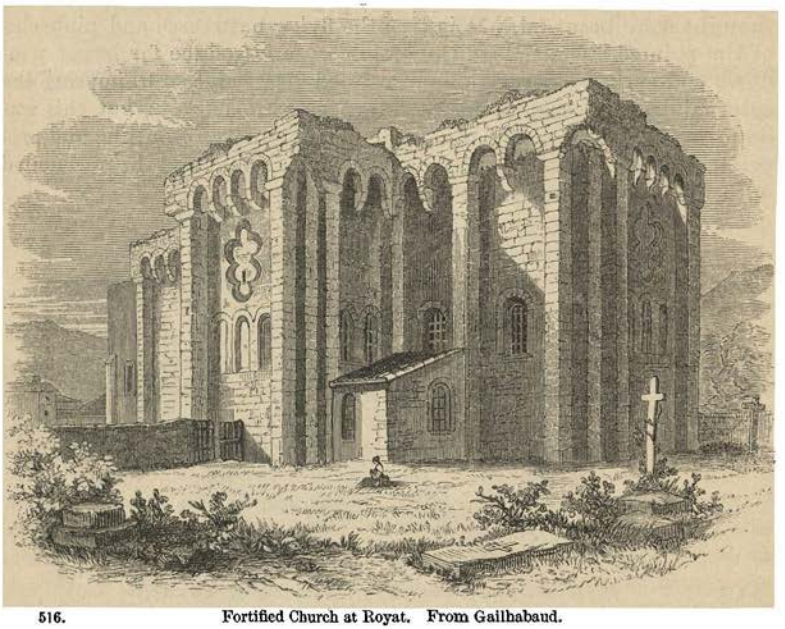


515. Plan of Chevet, Notre Dame de Puy. From Chapuy. No scale.

The age of these churches is not very well ascertained. M. Mallay is inclined to place them principally in the 10th century, though the pointed form of the vault at Issoire induces him to bring that down to the 12th century; but we have seen enough to know that such a pointed form, on the contrary, is more likely to be ancient than the rounded one, which requires better construction, although in that age it was thought more beautiful. My own impression is, that they belong generally to the 11th century, though some were no doubt commenced in the 10th, and probably continued to the 12th; but their uniformity of style is such, that not more than one century could have elapsed between the first and the last. Only one circular church, so far as I know, is found in the district. It is a sepulchral chapel in the cemetery at Chambon, small in size, being only 26 ft. wide over all, but elegant in its proportions, and showing the same style of decoration as the apses of the larger churches.

The cathedral of Puy en Veley is one of the finest and most interesting churches in this part of France, but unfortunately it has not been fully described. From a careful elevation of the south transept, published at Toulouse, it would appear, as far at least as the decoration is concerned, to belong to the style of Auvergne; but if M. Maurice's description is correct, it is one of the largest of the cupola churches,

having eight domes from the entrance to the eastern termination, which is square and without side aisles. This building altogether must present peculiarities well worthy of study, but regarding these it is dangerous to speak without more information than is now attainable.



516. Fortified Church at Royat. From Gailhabaud.

Among the exceptional churches of this district, one of the most interesting is that of Royat, illustrated in woodcut No. 516, being a specimen of a fortified church, such as are sometimes, though not frequently, found in France. That at Maguelonne, quoted above (p. 606), is another, and there are several others in the South of France; but none probably either so complete or showing so many castellated features as this. In its ruined state we lose the western, or possibly the central tower, which might have somewhat restored its ecclesiastical character; but even as it is, it is a singularly picturesque and expressive building, though it speaks more of war and bloodshed than of peace and goodwill to all men.

CHAPTER V.

FRANKISH STYLE.

CONTENTS.

Exceptional buildings — Basse Œuvre, Beauvais — Decoration.

NORTHERN PROVINCE.

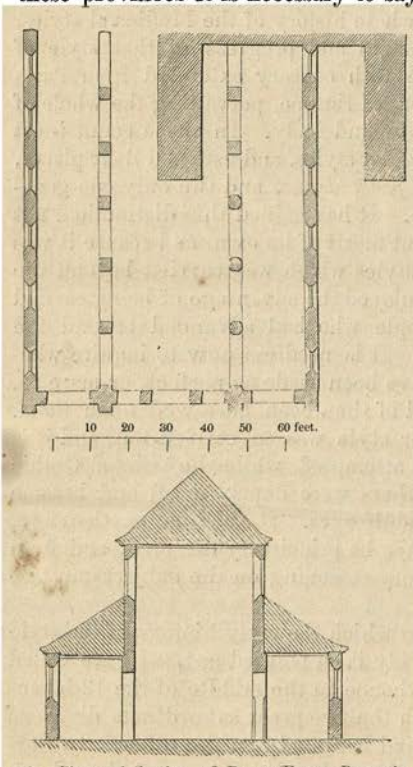
THE architecture of the Northern division of France is certainly the most interesting subject in the whole history of the Mediæval styles. This subject comprehends the origin and progress of that style of pointed architecture which in the 13th century extended from Paris as a centre to the remotest corners of Europe, pervading the whole of Germany, Britain, and even Spain and Italy. In these countries it probably obliterated their own peculiar styles, and usurped their places, so as to become the Gothic style *par eminence*, and the only one generally understood under that name. It has gained this distinction, not perhaps so much from any inherent merit of its own, as because it was the only one of all the Mediæval styles which was carried beyond the simple rudiments of the art, and enjoyed the advantage of being carried out by a powerful and united people who had advanced beyond the first elements of civilized society. It is needless now to inquire whether the other styles might not have been made as perfect, or more so, had the same amount of talent and of time been bestowed upon them. All we can say is, that no other style was so carried out, and it is impossible that it should now be attempted, while the pointed Gothic had the opportunity which the others were deprived of, and became the style of Europe during the middle ages. Its history is, therefore, that to which attention must always be principally directed, and from which all lessons and all satisfactory reasoning on the subject must be principally derived.

The three great divisions into which the early history of the style naturally divides itself have already been pointed out. I have called the central province Frankia, whence in the middle of the 12th century the pointed style issued, with the two great subordinate divisions of Normandy on the one hand, and Burgundy on the other. In Normandy a warlike race had raised themselves to power, and with an inconsistency characteristic of their state of civilization devoted to sacred purposes the wealth they had acquired by rapine and plunder, covering their province with churches, and perfecting a rude style of architecture singularly expressive of their bold and energetic character.

In Burgundy both the style and its history differed considerably from this. From some cause which has not yet been explained, this country became early the favourite resort of hermits and of holy men, who founded here the great monastic establishments that spread their influence not only over France, but over the whole of Europe, influencing to an immense extent all the relations of European society in the middle ages. The culminating epoch of the architecture of Normandy and Burgundy was the 11th century. In the 12th, the monarchial sway of the central province was beginning to be felt in them. In the 13th it superseded the local character of both, and gradually fused them with the whole of France into one great and singularly uniform monarchy.

Latin Style.[1]

Before proceeding to describe the local forms of architecture in these provinces it is necessary to say a few words regarding a class of buildings which have not hitherto been mentioned, but which must not be passed over. These cannot be included in any other style, and are so nearly devoid of architectural features, properly so called, that they might have been omitted but for one consideration. They bear so remarkable a resemblance to the earliest Christian churches of Rome on the one hand, and to the true Gothic on the other, that we cannot doubt their being the channel through which the latter was derived from the former. They are the oldest churches in Northern France, which confirms the above view.

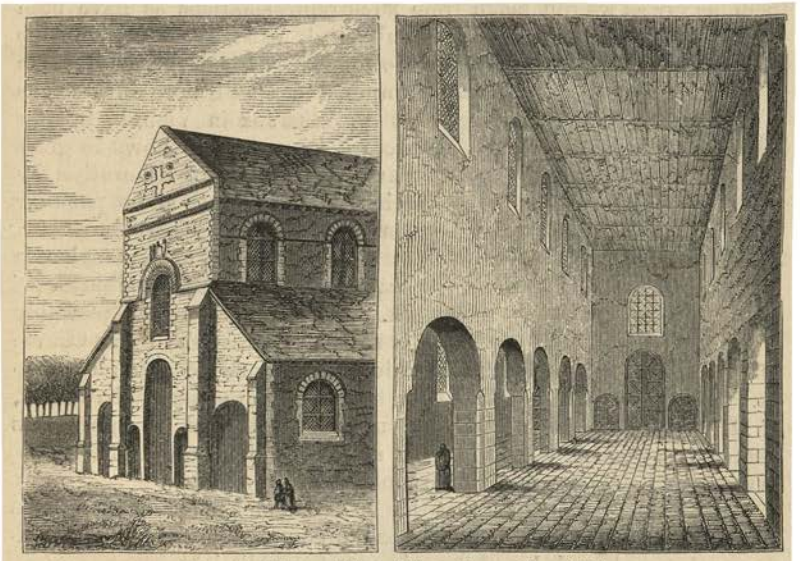


517. Plan and Section of Basse Œuvre, Beauvais.
From Woillez, Monumens Religieux de Beauvais.

The character of this style will be understood from the plan and internal and external view of its typical example, the Basse Œuvre at Beauvais (woodcuts Nos. 517 and 518). It will be seen that this building consists of a nave and side aisles, separated from each other by a range of plain arches resting on piers without either bases or capitals; on one side the angles are cut off, so as to give a slightly ornamental character; on the other they are

[1] "Style Latin" is the name generally adopted for this style by the French architects.

left square. The central aisle is twice the width, and more than twice the height, of the lateral aisles, and has a well-defined clerestory; the roof, both of the central and side aisles, is a flat ceiling of wood. The eastern end has been destroyed, but, judging from other examples, it probably consisted of 3 apses, one large in the centre and a smaller one at the end of each aisle.



518. External and Internal View of Basse Œuvre. From Woillez.

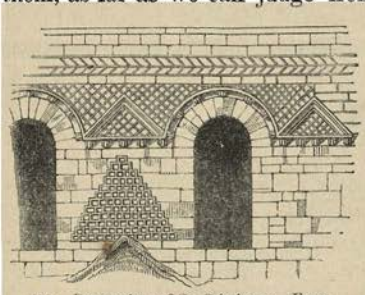
The similarity of the form of this church to the Roman basilicas will be evident in referring to the representations of those buildings, more especially that of St. Vincenzo alle tre fontane (woodcut No. 372), though the details have nothing in common except the use of flat tiles between the cornices of the arches, which is singularly characteristic of Roman masonry. The points in which this is evidently the source of some important peculiarities of the true Gothic are the subordination of the side aisles to the central one, and the perfectly developed clerestory. These are not found in any of the styles of France hitherto described.

Eventually, as we shall shortly see, the interior ceiling of Gothic vaults came to be of stone, protected externally by a wooden roof. This stone vault was not, I believe, attempted before the 11th century. In the meanwhile wooden-roofed churches, like that at Beauvais, seem to have been usual and prevalent all over the north of France, though, as may be supposed, both from the smallness of their size and the perishable nature of their materials, most of them have been either superseded by larger structures, or have been destroyed by fire or the accidents of time.

M. Woillez describes five or six as existing still in the diocese of Beauvais, and varying from the 6th or 7th century, which probably is

the date of the Basse Œuvre, to the beginning of the 11th century; and if other districts were carefully examined, others might be found. Normandy must perhaps be excepted, where the rude Northmen seem first to have destroyed all the churches, and afterwards to have rebuilt them with a magnificence they did not before possess.

Churches of the same class, or others at least extremely similar to them, as far as we can judge from such representations as have been published, exist even beyond the Loire. There is one at Savonières in Anjou, and a still more curious one at St. Généreux in Vienne, not far from Poitiers, which shows in great perfection a style of decoration by triangular pediments and a peculiar sort of mosaic in brick-work.



519. Decoration of St. Généreux. From Gailhabaud.

The same style of decoration is carried out in the old church of St. Jean at Poitiers, which probably is even older than the Basse Œuvre of Beauvais. The old church, which now forms the anté-church to St. Front at Perigeux, seems also to belong to the same class; but, if M. Félix de Verneilh's restoration is to be trusted, it approaches nearer to a Romanesque style than any other of its class, of which it may nevertheless possibly be the most southern example.

It is only very recently that the attention of French archæologists has been turned to these rude primordial churches of France, and consequently our knowledge of them is as yet very limited.

CHAPTER VI.

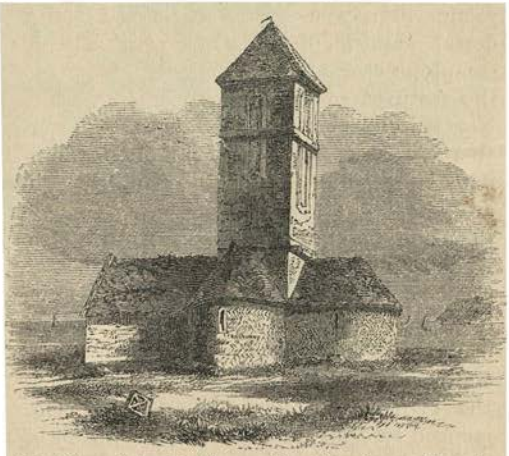
NORMANDY.

CONTENTS.

Churches at Caen — Gothic vaulting — Bayeux.

WITH one or two slight exceptions, the whole history of the Round-arched Norman Gothic is comprehended within a period of less than a century. No building in this style is known to have been even commenced before the year 1050, and before 1150 the pointed style had superseded it. Indeed, practically speaking, all the great and typical examples are crowded into the last 50 years of the 11th century. This was a period of great excitement and prosperity with the Northmen, who, having at last settled themselves in this fertile province, not only placed their dukes on an equality with any of the powers then existing in France, but by their conquest of England raised their chief to an importance and a rank superior to that of any other potentate in Europe except the German emperors of that day, with whom in fact they were, both by race and policy, more closely allied than they were with the people among whom they had settled.

There are two exceptional churches in Normandy which should not be passed over in silence: one is a little triapsal oratory at St. Wandrille; the other a similar but somewhat more important church at Querqueville, near Cherbourg, on the coast of Brittany. Both are rude and simple in the outline and ornaments, built with that curious herring-bone or diagonal masonry indicative of great age, and differing in every essential respect from the works of the Normans when they came into possession of the province. Indeed, like the transitional churches last described, these must be considered as the religious edifices of the



520. Triapsal Church at Querqueville. From Dawson Turner's Normandy.

inhabitants before that invasion; and if they show any affinity with any other style, it is to Belgium and Germany we must look for it rather than anywhere else within the boundaries of France.

Among the oldest-looking buildings of pure Norman architecture is the church of Léry, near Pont de l'Arche. It is the only one, so far as I know, with a simple tunnel-vault, and this is so massive, and rests on piers of such unusual solidity, as to give it an appearance of immense antiquity. There is no good reason, however, for believing that it really is older than the chapel of the Tower of London, which it resembles in most respects, though the latter is of somewhat lighter architecture.

Passing from this we come to a series of at least five important churches, all erected in the latter half of the 11th century. The first of these is the church of Jumièges, the western end of which was principally erected by Robert, afterwards Bishop of London, and finally Archbishop of Canterbury. Its precise date is not very well known, though it probably was begun before 1050, and certainly shows a far ruder and less complete style of architecture than any of the later churches. The nave apparently never was even intended to be vaulted; yet the walls and piers are far more massive than those of the churches of Caen, or that of Bocherville in its immediate neighbourhood. This last we know to have been commenced in the year 1050, and completed 1066. This church still retains in a wonderful state of completeness all the features of a Norman church of that age—the only part of a more modern date being the two western turrets, which are at least a century later.

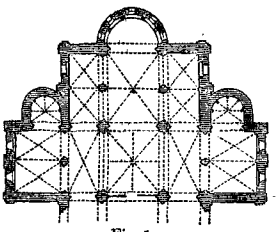


Fig. 1.

The next of the series is the well-known Abbaye aux Hommes, or St. Stephen's, at Caen, commenced by William the Conqueror, 1066, in gratitude for his victory at Hastings, and dedicated 11 years afterwards. Then follow the sister church of the Trinité, or Abbaye aux Dames, commenced in 1083, and the parish church of St. Nicolas at Caen, begun in the following year. These two last were almost certainly completed within the limits of the 11th century.

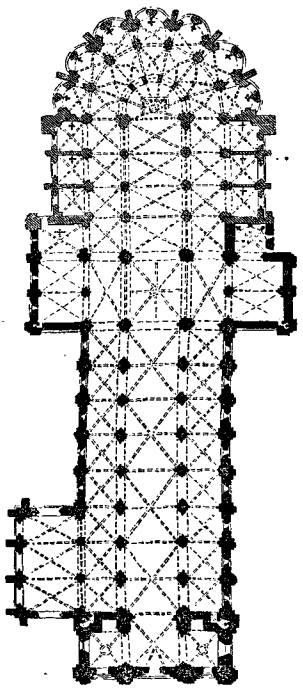
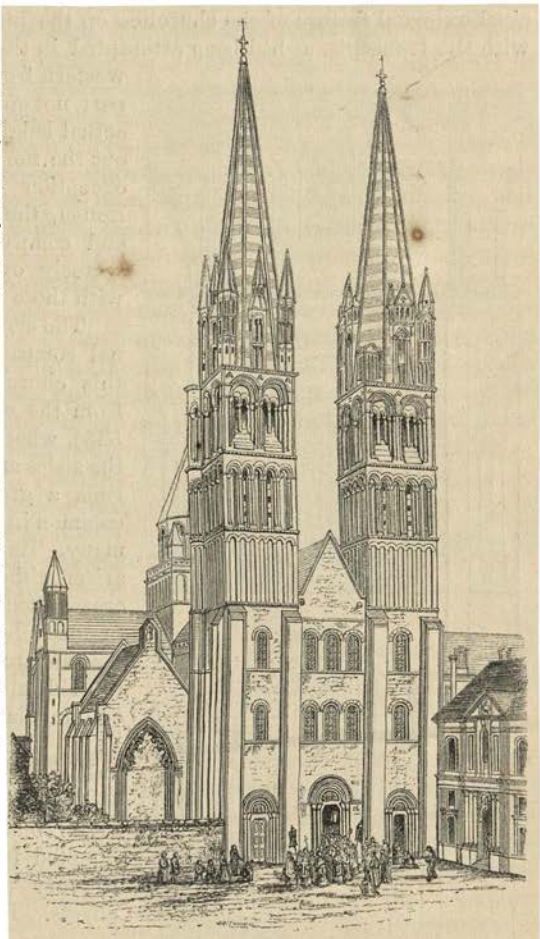


Fig. 2.

521. Plan of the Church of St. Stephen, Caen. From Ramée, Histoire de l'Architecture. Scale 100 ft. to 1 in.

Of all these the finest is St. Stephen's, which is a first-class church,

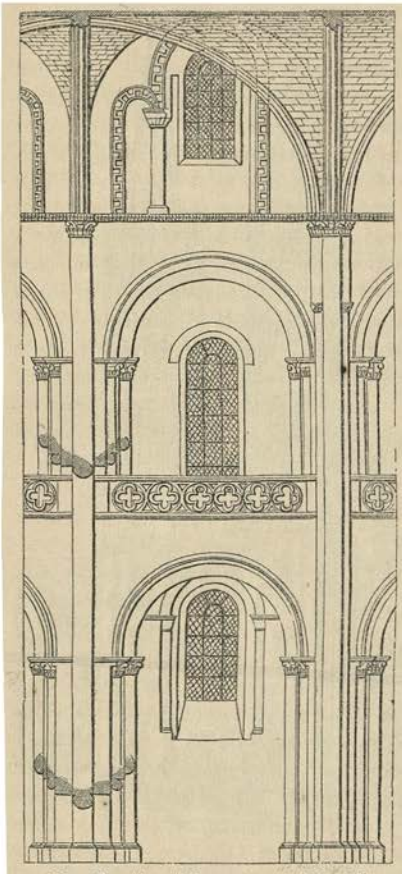
its extreme length being 364 ft. It was not originally so long, being terminated by an apse, as shown in the plan, which was superseded about a century afterwards by a chevet, as shown Fig. 2. This, however, was an innovation—all the round Gothic churches in Normandy having apses, nor do I know of a single instance of a chevet in the province. This circumstance points rather to Germany than to the south of France for the origin of the Norman style—indeed all the arrangements of this church are more like those of the Rhenish basilicas, that of Spires for example (woodcut No. 449), than any of those churches we have hitherto found within the limits of France itself. This is more remarkable at Jumièges than even here. None of them, however, have two apses, nor are lateral entrances at all in use; on the contrary, the western end, or that opposite the altar, is always, as in the true basilica, the principal entrance. In Normandy we generally find this flanked by two towers, which give it a dignity and importance not found in any of those styles we have been examining. These western towers afterwards in France became the most important features of the external architecture of churches. It is by no means clear whence they were derived. They are certainly neither Italian nor German, nor do they belong to any of those styles of the southern provinces of France which we have been describing. The churches of Auvergne are those which perhaps show the nearest approach to them.



522. Western Façade of St. Stephen, Caen. From Pugin and Britton's Normandy.

On the whole it appears most probable that the western fronts of the Norman churches were taken from the façades of Germany, and

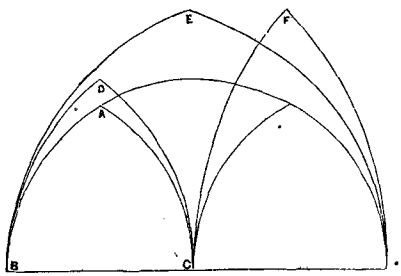
the towers added to give dignity to them. As will be seen from the view (woodcut No. 522), in St. Stephen's at Caen the feature is well marked and defined; for though the spires were apparently added at the same time as the chevet, the towers which support them evidently belong to the original design. This may be regarded as the prototype of the façades of nearly all the Gothic cathedrals of France. These western towers eventually superseded the attempt to raise the principal external feature of the churches on the intersection of the nave with the transepts, as had been attempted in the South, and made the western front the most important part, not only in decoration, but in actual height. Here and throughout the north of France, with the exception of the churches at Rouen, the central tower is low and comparatively insignificant, scarcely even aspiring to group with those of the western façade.



523. Elevation of Compartment of Nave of St. Stephen, Caen. From Pugin.

The arrangement of the internal compartments of the nave of this church will be understood from the elevation (woodcut No. 523), where it will be seen that the aisles are low, and above them runs a great gallery, a feature common in Italy, but rare in Germany. Its introduction may have arisen either from a desire for increased accommodation, or merely to obtain height, as it is evident that an arch the whole height of the side aisles and gallery would be singularly narrow and awkward. This was one of those difficulties which were only got over by the introduction of the pointed arch; but which, whenever attempted in the circular style, led to very unpleasing and stilted effects. It may however be, that it was suggested by the abutting galleries we find so frequently used in Southern churches. Be this as it may, the two stories of the aisles fill up the height far more pleasingly than could be done by one, and bring an abutment up to the very springing of the main vault of the nave. Here another difficulty met the architect, which was only got over effectually by the use of the pointed arch, and was perhaps, if not the only, at least the principal cause of its general introduction. It was this: that an intersecting

circular vault only fits a square compartment without stilting or skewing, or using some other contrivance to get over the difficulty. In the side aisles the compartments were practically always square, so that there was no difficulty in them. The nave was, generally speaking, twice the width of the aisles, so that there also square compartments might have been obtained, simply by making every compartment consist of two bays. This is what the Romans would have done, but such an expedient would have involved considerable difficulties. The span of the vaults raised over such compartments would have been large and difficult to support, and great awkwardness would have arisen from the total omission of every alternate pier from the design of the roof. These difficulties were met by a compromise. The general design of the roof was in squares, like that of the aisles; but a sort of auxiliary central arch was carried up from the intermediate piers to the roof, thus bringing these piers into the design of the nave, and assigning to them a certain amount of the support of the vault, as shown in the central aisle of the nave (woodcut No. 523), whereas the choir of the same church shows the quadripartite arrangement, which afterwards became universal.[1] This insertion was neither quite a rib, nor quite a compartment of a vault, but something between the two; and in spite of all the ingenuity bestowed upon it in Germany, France, and England, in the 11th and beginning of the 12th centuries, never produced an entirely satisfactory effect, till at last the pointed arch came to the rescue. It is easy to see from the annexed diagram how the introduction of the pointed arch obviated the difficulty. In the first place, supposing the great vault to remain circular, two segments of the same circle, A B, A C, carry the intersecting vault nearly to the height of the transverse one, or it could as easily be carried to the same height as at D. When both were pointed, as at E and F, it was easy to make their relative heights anything the architect chose, without any forcing or introducing any disagreeable curves. By this means the compartments of the vaults of the central nave were made the same width as those of the side aisles, whatever their span might be, and every compartment or bay was a complete design in itself, without reference to those next to it on either side.



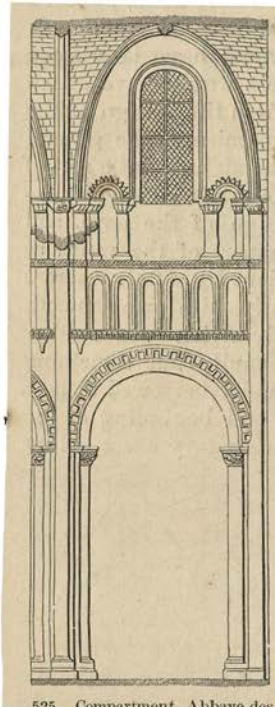
524. Diagram of Vaulting.

But this is anticipating: the form of the hexapartite vault will be

[1] This arrangement is known by the name of *hexapartite*, or *sexpartite*, because the compartment of the vault having been divided into four by the great diagonal arches crossing one another in the centre (which was the *quadripartite* arrangement), two of the four quarters were again divided by the arch thrown across from one intermediate pillar to the other, thus making six divisions in all, though no longer all of equal dimensions, as in the quadripartite method. Both these arrangements are shown in plan on woodcut No. 521.

easily understood from the woodcut No. 523, which also shows its defects, which the architect has at St. Stephen's tried to get over by a sort of addition to one side of his triforium windows; which however makes its one-sidedness even more apparent.

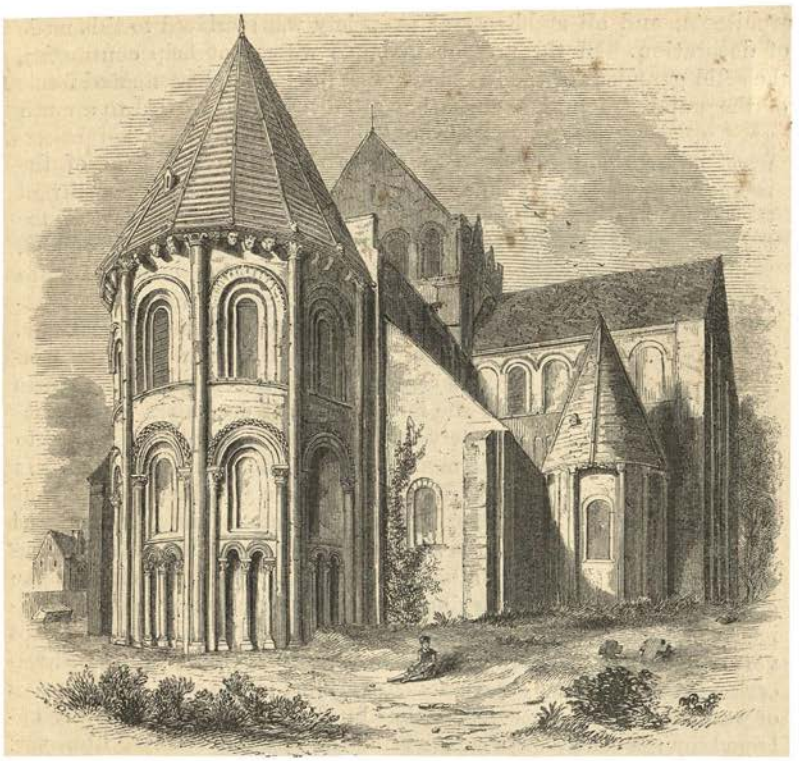
During the twenty or thirty years that elapsed between the building of St. Stephen's church and that of the Abbaye aux Dames, immense progress seems to have been made towards the new style, as will be seen from the annexed elevation of one compartment of the nave of the latter. The great gallery is omitted, the side aisles made higher, the piers lighter and more ornamental. The triforium is a mere passage under the upper windows, and so managed as not to intercept their light from any part of the church. Even the vaulting, though in some parts hexapartite, in others shows a great approach to the quadripartite vaulting of the subsequent age; this, however, is obtained by bringing down the main vault to the level of the side vault, not by raising the side arches to the level of the central, as was afterwards done. The greatest change is in the richness and elegance of the details, which shows great progress towards the more ornamental style that soon afterwards came into use.



525. Compartment, Abbaye des Dames, Caen. From Pugin.

The parochial church of St. Nicolas is naturally plainer than either of these royal abbeys. It shows considerable progress in construction, and deserves far more attention than it has hitherto met with. It is the only church, so far as I know, in Normandy, that retains the original external covering of its apse. This consists, as shown in the woodcut (No. 526), of a high pyramidal roof of stone, following to the eastward the polygonal form of the apse, and extending one bay towards the west. From an examination of the central tower, it is clear that this was not the original pitch of the roof of the church. This was nearly as low in all Norman churches as in those of Auvergne. Here it was a sort of semi-spire placed over an altar, to mark externally the importance of the part of the church beneath it. In appearance it is identical with the polygonal cones at Loches, mentioned before. At Bourges, and elsewhere in France, similar cones are found over chapels and altars; but in most instances they have been removed, probably from some defect in construction, or from their not harmonizing with the wooden roofs of the rest of the church. They were in fact the originals of the spires which afterwards became so much in vogue, and as such their history would be interesting, if properly inquired into.

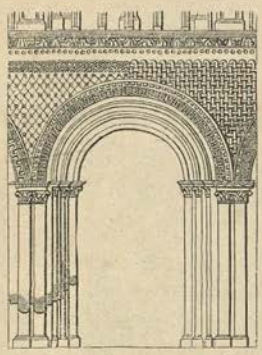
The cathedral of Bayeux, as now standing, is considerably more



533. East End of St. Nicolas, Caen. From Dawson Turner's Normandy.

modern than either of these; no part remaining of the church of Odo, the brother of the Conqueror, except the lower part of the western towers, and a crypt, which is still older. The pier arches of the nave belong to the first half of the 12th century, the rest of the church to the rebuilding, which was commenced 1157, after the town had been burnt, and the cathedral considerably damaged, by the soldiers of Henry I. At this time the apse was removed to make way for a chevet, which is one of the most beautiful specimens of early pointed Gothic to be found in France, and far surpasses its rival in the Abbaye aux Hommes at Caen. In the church at Caen, the alteration was probably made to receive the tomb of the Conqueror, when that veneration began to be shown to his remains which was denied to himself when dying. Here, however, the same motive does not seem to have existed, and it is more probable that the extension was caused by the immense increase of the priesthood in the course of the 11th and 12th centuries, requiring a larger choir for their accommodation. We know from the disposition of the choir, that the nave originally had a great gallery over the side aisles, and consequently a low clerestory. But before it was rebuilt in the end of the 12th, or beginning of the 13th century, the mania for painted glass had seized on the French

architects, and all architectural propriety was sacrificed to this mode of decoration. In the present instance we cannot help contrasting the solid grandeur of the basement with the lean and attenuated forms of the superstructure, though this attenuation was carried to a much greater extent afterwards.



527. Lower Compartment, Nave, Bayeux. From Pugin.

The diapering of the spandrils of the lower arches is another feature worthy of remark, as illustrating the history of the style. Before painted glass was introduced, the walls of all churches in Northern Europe were covered with fresco or distemper paintings, as was then, and is to the present day, the case in Italy. But when coloured windows came into use, the comparative dulness of the former mode of decoration was immediately felt, and the use of colour confined to the more brilliant transparent material. It was necessary to find a substitute for the wall painting, and the most obvious expedient was that of carving on the stone the same patterns which it had been customary to paint on them. An attempt was made, indeed, to heighten the effect of this carving by inlaying the lines with coloured mastic or cement; but the process was soon found to be not only very expensive but very ineffective, and gave way afterwards to sculptured figures in traceried pannels. These ornaments easily filled up the very small spaces of wall that were not occupied either by the windows, now greatly enlarged, or the constructive supports of the building. Now, however, that colour is gone both from the walls and the windows, this diapering gives a singularly rich and pleasing effect to the architecture of the lower story, and combined with the massiveness and varied richness of the piers themselves, renders this a nearly unique specimen of a Norman arcade, and one of the most beautiful that has come down to us.

These examples are, it is hoped, sufficient to make known the general characteristics of a style which is at the same time of great interest to the English reader from its proximity to our shores, and also from its influence on our own, and is moreover comparatively so familiar as to require less illustration than many others. Besides the examples above described, many other specimens of Norman architecture might have been given, filling up the details of the series, from the rude simplicity of Jumièges to the elaborate richness of the nave of Bayeux, and showing a rapidity of progress and boldness in treating the subject hardly surpassed in the succeeding age; but still with all its developments it can only be considered as a first rude attempt to form a style of architecture which was superseded before its principles began to be understood, and lost before it had received any of those finishing touches which form the great element of beauty in all the more perfect styles.

CHAPTER VII.

BURGUNDY.

CONTENTS.

Abbeys of Tournus and Cluny — Cathedral of Autun — Church of St. Menoux.

THE causes which led to the display of architectural magnificence during the 11th and 12th centuries in the province of Burgundy were, as before remarked, widely different from those which produced the same result in Normandy. It was not in this instance that a series of brilliant conquests raised a line of princes to power, and enabled them to adorn their province with splendid churches, and other evidences of material wealth.

The dukes of Burgundy in this age had not yet taken that rank among their compeers to which they afterwards attained. But to make up for this, the country seems, from the time at least when St. Gall and Columban settled themselves at Luxeuil till late in the middle ages, to have been the first and principal seat of those great monastic establishments which had so overwhelming an influence on the faith and forms of those times.

Why this province should have been particularly selected for this purpose is by no means clear. We must go either to India in the flourishing period of Buddhism, or to Thibet in the present day, to find anything analogous to the monastic establishments of the 11th century in this district. All these monasteries have now passed away, and few have left even any ruins to attest their former greatness and magnificence. The great basilica of Cluny, the noblest church of the 11th century, has been wholly removed within the last sixty years. Clairvaux was first rebuilt in the style of the Renaissance, then finally swept away within the last few years. Citeaux perished earlier, and little now remains to attest its former greatness. Luxeuil is an obscure village. The destruction of the church of St. Benigne, at Dijon, has already been referred to, and it would be easy to swell the catalogue of similar consequences of the great Revolution.

Tournus still remains, and at Vezelay fragments exist. Charlier, Avallon, Autun, Langres, and Besançon, still possess in their cathedrals and churches some noble remnants of Burgundian architecture. Besides these, there are numerous parish churches and smaller edifices which would easily enable us to make up a history of the style, were they carefully examined and drawn. Burgundy is, however, a *terra ignota* to the scientific antiquary, and very little has yet been done either to describe or elucidate its architectural history,

though enough to show the principal characteristic features of the style of architecture which there prevailed.

The church of St. Benigne at Dijon, mentioned above, was one of the oldest in Burgundy, and probably an excellent type of the style of that country. But its total destruction and the insufficiency of the plates published by Dom Plancher prevent anything like a satisfactory study of it. The abbey church of Tournus is perhaps nearly as old. Its antiquity is manifested by the rudeness both of its design and execution. The nave is separated from the aisles by plain cylindrical columns without bases, the capitals of which are joined by circular arches at the height of the vaults of the aisle. From the capitals rise dwarf columns supporting arches thrown across the nave. From one of these arches to the other is thrown a tunnel vault, which thus runs the cross way of the building; being, in fact, a series of arches like those of a bridge extending the whole length of the nave. This is, I believe, the only known instance of this arrangement, and is interesting as contrasting with the longitudinal tunnel vaults so common both in this province and the South.

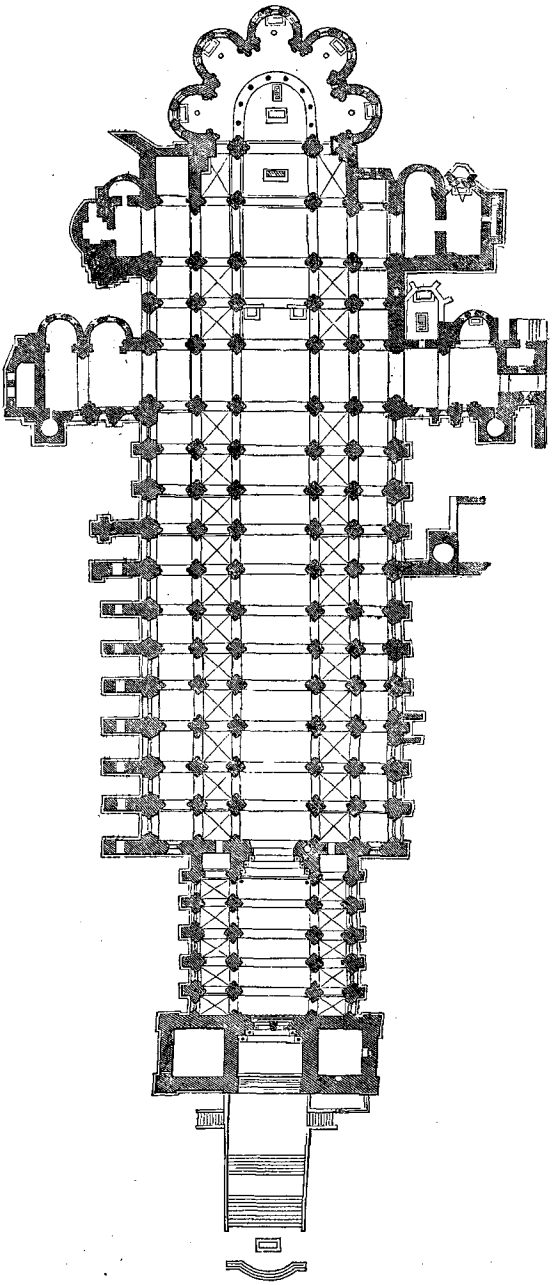
528. View of Interior of Abbey at Tournus.
From Taylor and Nodier.

It is a curious instance of an experiment whose object was the getting over the difficulties which were afterwards removed by the invention of the intersecting arch. In the mean time this Tournus vault offered some advantages well worthy of consideration. The first of these was that the thrust of the vault was wholly longitudinal, so that only the supporting arches of the transverse vaults required to be abutted. These being low and in a well-defined direction were easily provided for. Another advantage was, that it allowed of a large and well-defined clerestory, which, as we have seen, was impossible with the longitudinal vaults. On the other hand, the artistic awkwardness of the plan was a fatal objection, which, instead of conducting the eye

pleasingly along the vault, offered only a succession of interruptions to the perspective.

In the nave of this church all the arches are circular; in the choir, which dates early in the 11th century, if not before, and which is perhaps older than the nave, the great transverse arches are slightly pointed, and support at the intersection a dome, which forms the most beautiful feature in the church.

The pride of Burgundy was the great abbey church of Cluny, which, with its narthex or ante-church, measured 580 ft. in length, or considerably more than any other church erected in France in any age. Its nave was throughout 37 ft. 6 in. in width, and it had double side aisles, making the total internal width 120 ft., and the whole area covered by it was upwards of 70,000 ft. Nor do even these colossal dimensions convey an adequate idea of its magnificence. The style throughout was solid and grand, and it must have possessed a

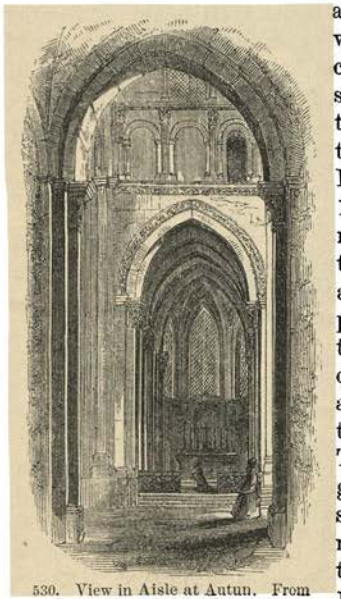


529. Plan of Abbey Church at Cluny. From Lorain's Histoire de l'Abbaye. Scale 100 ft. to 1 in.

degree of massive magnificence which we so frequently miss among the more elegant beauties of subsequent erections.

The semi-dome of the chevet was supported by eight noble columns, through which were seen in perspective a circle of five apsidal chapels. Externally the roof was crowned by five larger and three smaller towers; and the whole was carried up solidly to a height unrivalled among the buildings of this age. What added to its interest was, that the church at least was at the time of its destruction an almost unaltered specimen of the architecture of the 11th and 12th centuries, having been commenced in 1089 by St. Hugues, and dedicated 1131. The narthex or ante-chapel, though somewhat more modern, was probably completed within the limits of the 12th century. These dates have been disputed, but principally on account of the theories prevalent regarding the origin of the pointed arch. This feature was used here, as it is found elsewhere, in all the pier arches separating the nave from the aisles—the vaulting of the aisles having probably been also pointed, while the great vault of the church is a plain tunnel vault with merely transverse ribs on its surface. That of the narthex is a transverse vault of a later date, but singularly clumsy in its construction. Whether it had a clerestory or not, is not quite clear from such drawings as we possess; but if not, there certainly was a double gallery throughout, the upper range of which, if not both, served to admit light.

What the exact ordinance of this church was, we should hardly be able to make out from the representations we possess, were it not that some other contemporary churches in the same style still remain to us. Among these, one of the most perfect is the cathedral at Autun, formerly the chapel of the dukes of Burgundy, commenced about the year 1060, and consecrated 1132. The arrangement of its nave is extremely similar to that of Cluny, with these differences, that at Autun the great vault is slightly pointed, and that attached to the piers of the nave are pilasters instead of three-quarter columns, as at Cluny. In the ante-church, however, at the latter place, the same pilastered arrangement occurs. This is the characteristic of the true Burgundian style, and so peculiar is it, and so classical, that some antiquaries have not hesitated to consider it as a bad imitation of Gothic forms belonging to the 15th or 16th centuries. In fact its fluted columns or pilasters, their Corinthian capitals, and the whole arrangement are so eminently classical as almost to justify the doubt in those who are not familiar with the history of the southern styles of France. There can, however, be no

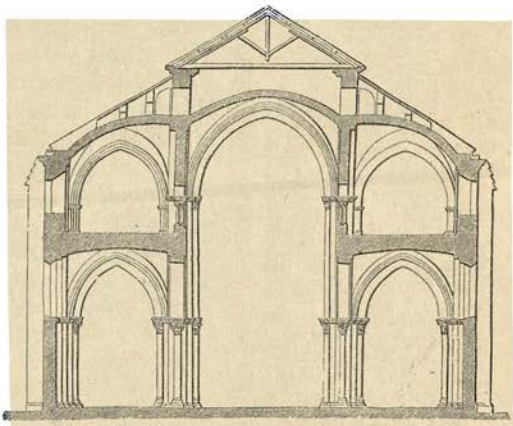


530. View in Aisle at Autun. From Chapuy, Cathédrales Françaises.

doubt as to the age of these examples, and as little as to the models from which they are copied; for in this very city of Autun we have two Roman gateways (one represented in woodcut No. 273), and there are others at Langres and elsewhere, which, except the pointed arch and other constructive peculiarities, are almost identical with the style of these churches. Whether from want of familiarity with this style, or from whatever cause, it certainly is not pleasing to our eyes, and we turn with pleasure to the ruder but more purpose-like inventions of the more purely Gothic architecture of the same age.

531. View in Nave at Autun. From Chapuy.

Among these the province affords no more beautiful specimen than the nave of Vezelay, which possesses all the originality of the Norman combined with the elegance of the Southern styles. In this specimen the pier arches are wide and low, there is no triforium of any sort, and the windows are small. The vault is formed by immense transverse ribs, crossing from pier to pier, and forming square compartments, divided each by plain intersecting arches without ribs, rising considerably in the centre. This certainly is an improvement on the vault at Cluny, but cuts the roof too much up into divisions. Perhaps its greatest defect is its want of height, being only 60 ft. in the centre, while the total width is 86 ft. from wall to wall. But the details of the whole are so elegant as in great measure to redeem these faults.



532. Section of Narthex at Vezelay. From Didron's Annales Archéologiques.

The narthex, or ante-church, resembles that at Cluny both in its importance and in being somewhat more modern than the church itself. Here it dates from the beginning of the 12th century, while the nave seems wholly to belong to the 11th. It is an extremely instructive example of the progress of vaulting. It has the bold transverse ribs, and the plain intersecting vaults, which are here, in accordance with the Southern practice, abutted by the arches of the galleries. In the walls of the galleries are windows large enough to admit a considerable portion of

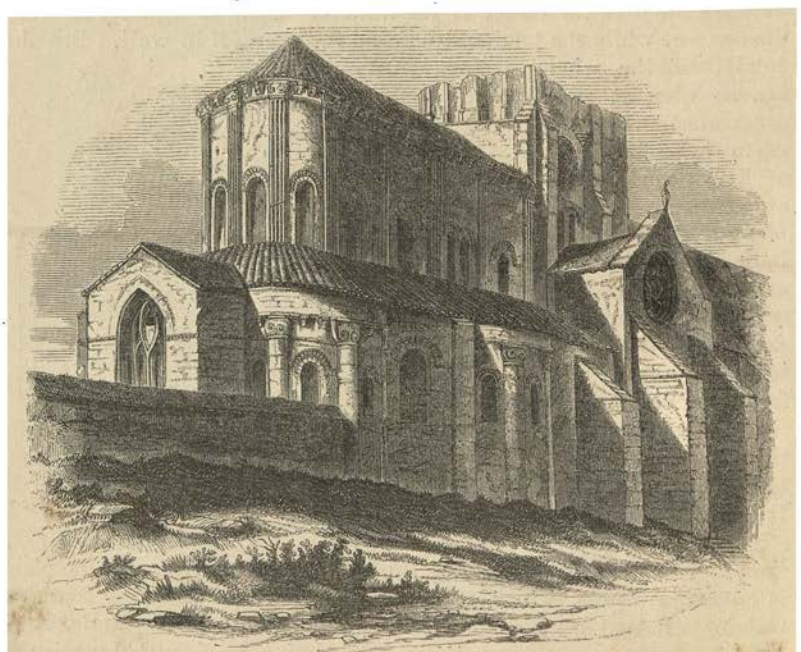
light. But the vaults are here fast losing their original purpose. The central one is covered by a wooden roof. An arched construction supports the solid roof over the side aisles, but the central vault is covered by a wooden roof, so that the stone vault has become a mere ceiling, leaving only one easy step to the completion of the plan of Gothic roofing. This step was to collect the vaults of the side galleries into a mass over each pier, and use them as flying buttresses, and to employ wooden roofs everywhere, wholly independent of the vaults which they covered.

Vezelay is one of the most beautiful of the remaining churches of its age in Burgundy, notwithstanding that the choir, which is a chevet in the early pointed style, like that at Caen and Bayeux, rather disturbs the harmony of the whole.

Among the remaining churches of this class, the cathedral at Besançon is one of the few double apse churches of France, and in plan at least very much more like what we find on the banks of the Rhine.

Another very interesting church is that of Ainay, at Lyons, which in its older parts bears considerable similarity to that of Tournus, though less rude in details. Like that church it possesses pointed arches, which I see no reason for assuming to be subsequent to the beginning of the 11th century.

The cathedral at Vienne, mentioned above, might from some of its details, particularly the form of the pier arches, be fairly classed with this style, showing the fluted pilasters and other classical adjuncts found here. These peculiarities are common both to this and the Pro-



533. East End, St. Menoux. From Allier, l'Ancien Bourbonnais.

vençal style, but the boundary between them is by no means clearly defined.

A little beyond the limits of the province, on the northern border, we find the church of St. Menoux, belonging in many of its details certainly to the style we are describing. This is most distinctly observable in the exterior of the apse of the chevet, which it is rare to find unaltered; here it is surrounded by a series of pilasters of rude classical design, which give it a peculiar local character. Internally too, its chevet (woodcut No. 534) is remarkably elegant, though less

534. Chevet, St. Menoux. From Allier.

Burgundian in style. It shows to what an extent the stilting of round arches could be used to overcome the difficulty of combining arches of different spans, but all requiring to be carried to the same height. Like all the old churches of the province, it possesses a large and important narthex, here the oldest part of the church, and a rude and

characteristic specimen of a style of architecture that can hardly be later than the 10th century.

These few specimens must suffice to define a style which well deserves a volume to itself, not only on account of its own architectural merit, but from the enormous influence exercised both by the style and by its monastic founders on the civilization of Europe in the age to which it belongs. During the 11th and 12th centuries Cluny was more important to France than Paris. Its influence on the whole of Europe was second only to that of Rome—civilizing barbarians by its missionaries, withstanding the feudal nobility, and in many ways counteracting the ferocity of the times.

CHAPTER VIII.

FRANKISH ARCHITECTURE.

CONTENTS.

Historical notice — The pointed arch — Freemasonry — Mediæval architects.

FRANKIA.

THE architectural history of the central or Frankish province is widely different from that of any of those we have yet examined. It is true Paris was nominally the capital of France, and in the time of Charlemagne had been the centre of a great and powerful empire. His reign, however, seems to have been the last expiring effort of a previous civilization, rather than the foundation of a new and progressive state of affairs. After his death a period of anarchy ensued; and what with the weakness of the kings, the disorganization of the people, and the ravages of the Northmen and other barbarians, no part of France was in a less satisfactory position for the cultivation of the arts of peace than that which might have been expected to take the lead in all. Thus, while the very plunder of the central province enabled the Normans to erect and sustain a powerful state on the one side, and to adorn it with monuments which still excite our admiration, and the organization of the monks of Burgundy on the other hand enabled them to cultivate the arts of peace to an extent hardly known before their time in Northern Europe, Central France remained incapable even of self-defence, much more of raising monuments of splendour and art.

There are no doubt buildings in the round Gothic style in this province, but they are few and insignificant compared with those we have been describing, either in the South or in Normandy and Burgundy. Even in Paris the great church of St. Germain des Près, the burial-place of the earlier kings, and apparently the most splendid edifice of the capital, was not more than 50 ft. in width by 200 in length before the rebuilding of its chevet in the pointed style, and possessed no remarkable features of architectural display. St. Geneviève was even smaller and less magnificent; and if there was a cathedral, it was so insignificant that it has not been mentioned by any contemporary historian.

Several of the provincial capitals had, probably, cathedrals of some extent and magnificence. All these, however, were found so unsuited to the splendid tastes of the 12th and 13th centuries, that they were pulled down and rebuilt on a more extended scale; and it is only from

little fragmentary portions of village churches that we learn that the round Gothic style was really at one time prevalent in the province, and possessed features according to its locality resembling those of the neighbouring styles. So scanty indeed are such traces, that it is hardly worth while to recapitulate here the few observations that might occur on the round Gothic styles as found within the limits of the province.[1]

This state of affairs continued down to the reign of Louis le Gros, 1108–1136, under whom the monarchy of France began to revive. This monarch, by his activity and intelligence, restored to a considerable extent the authority of the central power over the then independent vassals of the crown. This was carried still further under the reign of his successor, Louis le Jeune, though perhaps more was owing to the abilities of the Abbé Suger than to either of these monarchs. He seems to have been one of those great men who sometimes appear at a crisis in the history of their country, to guide and restore what otherwise might be left to blind chance and perish for want of a master mind. Under Philip Augustus the country advanced with giant strides, till under St. Louis it arrived at the summit of its power. For a century after this it sustained itself by the impulse thus given to it, and with scarcely an external sign of that weakness which betrayed itself in the rapidity with which the whole power of the nation crumbled to pieces under the first rude shock sustained at Crecy from the hand of Edward III.

More than a century of anarchy and confusion followed this great event, and perhaps the period of the English wars may be considered as the most disastrous of the whole history of France, as the previous two centuries had been the most brilliant. When she delivered herself from these troubles, she was no longer the same. The spirit of the middle ages had passed away. The simple faith and giant energy of the reigns of Philip Augustus and St. Louis were not to be found under Louis IX. and his inglorious successors. With the accession of Francis I. a new state of affairs succeeded, to the total obliteration of all that had gone before, at least in art.

The improvement of architecture, keeping pace exactly with the improved political condition of the land, began with Louis le Gros, and continued till the reign of Philip of Valois. It was during the two centuries comprised within this period that the pointed architecture was invented, which became the style, not only of France, but of all Europe during the middle ages; and is, *par excellence*, the Gothic style of Europe. The cause of this pre-eminence is to be found partly in the mere accident of the superior power, at the critical period, of the nation to which the style belonged, and also because it was found the most fitted to carry out certain religious principles and decorative

[1] The Church of St. Remi at Rheims ought perhaps to be treated as an exception to this assertion: it has, however, been so much altered in more modern times as almost to have lost its original character. It nevertheless retains the outlines of a vast and noble basilica of the early part of the 11th century, presenting considerable points of similarity to those of Burgundy.

notions, which were prevalent at the time, and which will be noted as we proceed.

The style therefore with which this chapter is concerned is that which commenced with the building of the Abbey of St. Denis, by Suger, A.D. 1144, which culminated with the building of the Ste. Chapelle of Paris by St. Louis, 1244, and which received its greatest amount of finish at the completion of the choir of St. Ouen at Rouen, by Mark d'Argent, in 1339. There are pointed arches to be found in the central province as well as all over France before the time of the Abbé Suger, but they are only the experiments of masons struggling with a constructive difficulty; and the pointed style continued to be practised for more than a century and a half after the completion of the choir of St. Ouen, but it is no longer the pure and vigorous style of the earlier period. It resembles more the efforts of a national style to accommodate itself to new tastes and new feelings, and to maintain itself by ill-suited arrangements against the innovation of a foreign style which was to supersede it, but whose influence was felt long before its definite appearance.

The sources from which the pointed arch was taken have been more than once alluded to in the preceding pages. It is a subject on which a great deal more has been said and written than was at all called for by the real importance of the question. Scarcely anything was done in pointed architecture which had not already been done in the round-arched styles. Certainly there is nothing which could not have been done, at least nearly as well, and many things much better, by adhering to the complete instead of to the broken arch. The coupling and compounding of piers had already been carried to great perfection, and the assignment of a separate function to each shaft was already a fixed principle. Vaulting too was nearly perfect, only that the main vaults were either hexapartite or 6-celled, instead of quadripartite, as they afterwards became; an improvement certainly, but not of much importance. Ribbed vaulting was the greatest improvement which the Mediæval architects made on the Roman vaults, giving not only additional strength of construction, but an apparent vigour and expression to the vault, which is one of the greatest beauties of the style. This system was in frequent use before the employment of the pointed arch. The different and successive phases of decoration were also one of the Mediæval inventions which was carried to greater perfection in the round Gothic styles than in the pointed. Indeed, it is a fact, that except window tracery, and perhaps pinnacles and flying buttresses, there is not a single important feature in the pointed style that was not invented and currently used before its introduction. Even of windows, which are the important features of the new style, by far the finest are the circular or wheel windows, which have nothing pointed about them, and which always fit awkwardly into the pointed compartments in which they are placed. In smaller windows, too, by far the most beautiful and constructively appropriate tracery is that where circles are introduced into the heads of the pointed windows; but after hundreds of experiments and expedients, the difficulty of

fitting these circles into spherical triangles, and the unpleasant form to which their disagreement inevitably gave rise, proved ultimately so intolerable, that the architects were forced to abandon the beautiful constructive geometric tracery for the flowing or flamboyant form: and this last was so ill adapted to stone construction, that ultimately the method was abandoned altogether. These and many other difficulties would have been avoided, had the architects adhered to the form of the unbroken arch; but on the other hand it must be confessed that the pointed forms gave a facility of arrangement which was an irresistible inducement for its adoption; and especially to the French, who always affected height as the principal element of architectural effect, it afforded an easy means for the attainment of this object. Its greatest advantage was the ease with which any required width could be combined with any required height. With this power of adaptation the architect was at liberty to indulge in all the wildness of the most exuberant fancy, hardly controlled by any constructive necessities of the work he was carrying out. Whether this was really an advantage or not, is not quite clear. A tighter rein on the fancy of the designer would certainly have produced a purer and severer style, though we might have been deprived of some of those picturesque effects which charm so much in Gothic cathedrals, especially when their abruptness is softened by time and hallowed by associations. We must, however, in judging of the style, be careful to guard ourselves against fettering our judgment by such associations. There is nothing in all this that might not have been as easily applied to round as to pointed arches, and indeed it would certainly have been so applied, had any of the round-arched styles arrived at maturity.

Far more important than the introduction of the pointed arch was the invention of painted glass, which is really the important formative principle of Gothic architecture; so much so, that there would be more meaning in the name, if we were to call it the "*painted glass style*," instead of the pointed arch style.

In all the earlier attempts at a pointed style, which have been alluded to in the preceding pages, it was confined to the vaults, pier arches, and merely constructive parts, while the decorative parts, especially the windows and doorways, were still round-headed. The windows were small, and at considerable distances, a very small surface of openings filled with plain white glass being sufficient to admit all the light that was required for the purposes of the building, while more would have destroyed the effect by the garish lightness that is now so offensive in most of our great cathedrals. As soon, however, as painted glass was introduced the state of affairs was altered: the windows were first enlarged, as far as was thought possible without endangering the painted glass, with the imperfect means of supporting it then known.[1] All circular plans were abandoned, and polygonal apses and chapels of the chevet introduced; and lastly, the windows

[1] These consisted of strong iron bars, wrought into patterns in accordance with the design painted on the glass.

being made to occupy as nearly as was possible the whole of each face of these polygons, the lines of the upper part of the window came internally into such close contact with the lines of the vault, that it was almost impossible to avoid making them correspond the one with the other. Thus the windows took the pointed form already adopted for constructive reasons in the vaults. This became even more necessary when the fashion was introduced of grouping two or three simple windows together so as to form one; and lastly, when those portions of wall which separated these windows one from the other had become attenuated into mullions, and the upper part into tracery, until in fact the whole wall was taken up by the new species of decoration.

So far as internal architecture is concerned, the invention of painted glass was perhaps the most beautiful ever made. The painted slabs of the Assyrian palaces are comparatively poor attempts at the same effect. The hieroglyphics of the Egyptians were far less splendid and complete; nor can the painted temples of the Greeks, nor the mosaics and frescos of the Italian churches, be compared with the brilliant effect and party-coloured glories of the windows of a perfect Gothic cathedral, where the whole history of the Bible is written in the hues of the rainbow by the earnest hand of faith.

Unfortunately no cathedral retains its painted glass in anything like such completeness; and so little is the original intention of the architects understood, that we are content to admire the plain surface of white glass, and to consider this as the appropriate filling of traceried windows, just as our fathers thought that whitewash was not only the purest, but the best mode of decorating a Gothic interior. What is worse, modern architects, when building Gothic churches, fill their sides with large openings of this class, not reflecting that a gallery of picture-frames without the pictures is after all a sorry exhibition; but so completely have we lost all real feeling for the art, that its absurdity does not strike us now.

It will, however, be impossible to understand what follows, unless we bear in mind that all windows in all churches erected after the middle of the 12th century were at least intended to be filled with painted glass, and that the principal and guiding motive in all the changes subsequently introduced into the architecture of the age was to obtain the greatest possible space and the best arranged localities for its display.

FREEMASONRY.

The institution of freemasonry is another matter on which, like the invention of the pointed arch, a great deal more has been said than the real importance of the subject at all deserves. Still this subject has been considered so all-important, that it is impossible to pass it over here without some reference, if only to explain why so little notice will be taken of its influence, or of the important names which are connected with it.

Before the middle of the 12th and beginning of the 13th century, it is generally admitted that the corporation of freemasons was not sufficiently organized to have had much influence on art. At that time it is supposed to have assumed more importance, and to have been

the principal guiding cause in the great change that then took place in architecture. Those who adopt this view, forget that at that time all trades and professions were organized in the same manner, and that the guild of masons differed in no essential particulars from those of the shoemakers or hatters, the tailors or vintners—all had their masters and past-masters, their wardens, and other officers, and were recruited from a body of apprentices, who were forced to undergo years of probationary servitude before they were admitted to practise their art.

But though their organization was the same, the nature of their arts forced one very essential distinction upon the masons, inasmuch as all the usual trades were local, and the exercise of them confined to the locality where the tradesmen resided, while the builders were forced to go wherever any great work was to be executed.

Thus the shoemakers, tailors, bakers, and others, lived among their customers, and just in such numbers as were required to supply their usual recurring wants. It is true the apprentices travelled to learn their profession and see the world before settling down, but after that each returned to his native town or village, and then established himself among his friends or relatives, where he was known by all, and where he at once took his station without further trouble.

With the mason it was different: his work never came to him, nor could it be carried on in his own house; he always was forced to go to his work; and when any great church or building was to be erected in any town, which was beyond the strength of the ordinary tradesmen of the place to undertake, masons were sent for, and flocked from all the neighbouring towns and districts to obtain employment.

At a time when writing was almost unknown among the laity, and not one mason in a thousand could either read or write, it is evident that some expedient must be hit upon by which a mason travelling to his work might claim the assistance and hospitality of his brother masons on the road, and by means of which he might take his rank at once, on reaching the lodge, without going through tedious examinations or giving practical proof of his skill. For this purpose a set of secret signs was invented, which enabled all masons to recognise one another as such, and by which also each man could make known his grade to those of the same rank, without further trouble than a manual sign, or the utterance of some recognised pass-word. Other trades had something of the same sort, but it never was necessary for them to carry it either to the same extent nor to practise it so often as the masons, being for the most part resident in the same place and knowing each other personally. The masons, thus from circumstances organized more completely than other trades, were men skilled in the arts of hewing and setting stones, acquainted with all recent inventions and improvements connected with their profession, and capable of carrying out any work that might be entrusted to them, though always under the guidance of some superior personage, whether he was a bishop or abbot, or an accomplished layman. In the time of which we are speaking, which was the great age of Gothic art, there is no instance of a mason of any grade being called upon to furnish the design as well as to execute the work.

It may appear strange to us in the 19th century, among whom the great majority really do not know what true art means, that six centuries ago eminent men, not specially educated to the profession of architecture, and qualified only by talent and good taste, should have been capable of such vast and excellent designs; but a little reflection will show how easy it is to design when art is in the right path.

If for instance we take a cathedral, any one of a series—let us say Paris: when it was completed, or nearly so, it was easy to see that though an improvement on those which preceded it, there were many things which might be better. The side aisles were too low, the gallery too large, the clerestory not sufficiently spacious for the display of the painted glass, and so on. Let us next suppose the Bishop of Amiens at that period determined on the erection of his cathedral. It was easy for him or his master-mason to make these criticisms, and also to see how to avoid these mistakes; they could easily also see where width might be spared, especially in the nave; how also a little additional height and a little additional length would improve the effect of the whole. During the progress of the Parisian works also some capitals had been designed, or some new form of piers, which were improvements on preceding examples, and generally more confidence and skill would be derived from experience in the construction of arches and vaults. All these of course would be adopted in the new cathedral; and without making drawings, guided only by general directions as to the plan and dimensions, the masons might proceed with the work, and introducing all the new improvements as it progressed, they would inevitably produce a better result than any that preceded it, without any especial skill on the part either of the master-mason or his employer.

If a third cathedral were to be built after this, it would of course contain all the improvements made during the progress of the second, and all the corrections which its results suggested; and thus, while the art was really progressive, it required neither great individual skill nor particular aptitude to build such edifices as we find.

In fine arts we have no illustration of this in modern times; but all our useful arts advance on the same principles, and lead consequently to the same results. In ship-building, for instance, if we take a series of ships, from those in which Edward III. and his bold warriors crossed the Channel to the great line-of-battle ships now lying at anchor in our harbours, we find a course of steady and uninterrupted improvement from first to last. Some new method is tried: if it is found to succeed, it is retained; if it fails, it is dropped. Thus the general tendency constantly leads to progress and improvement. And, to continue the comparison a little further: this progress in the art is not attributable to one or more eminent naval architects. Great and important discoveries have no doubt been made by individuals, but in these cases we may generally assume that, the state of science being ripe for such advances, had the discovery in question not been made by one man, it soon would have occurred to some other.

The fact is, that in a useful art like that of ship-building, or in an

art combining use and beauty like that of architecture—that is, when the latter is a real, living, national art—the progress made is owing, not to the commanding abilities of particular men, but to the united influence of the whole public. An intelligent sailor who discusses the good and bad qualities of a ship, does his part towards the advancement of the art of ship-building. So in architecture, the merit of any one admirable building, or of a high state of national art, is not due to one, or to a few master minds, but to the aggregation of experience, the mass of intellectual exertion, which alone can achieve any practically great result. Whenever we see any work of man truly worthy of admiration, we may be quite sure that the credit of it is not due to an individual, but to thousands working through a long series of years.

The pointed Gothic architecture of Germany furnishes a negative illustration of the view which we have taken of the conditions necessary for great architectural excellence. There the style was not native, but introduced from France. French masons were employed, who executed their work with the utmost precision, and with a perfection of masonic skill scarcely to be found in France itself. But in all the higher elements of beauty, the German pointed Gothic cathedrals are immeasurably inferior to the French. They are no longer the expression of the devotional feelings of the clergy and people: they are totally devoid of the highest order of architectural beauty.

The truth of the matter is, that the very pre-eminence of the great masonic lodges of Germany in the 14th century destroyed the art. When freemasonry became so powerful as to usurp to itself the designing as well as the execution of churches and other buildings, there was an end of true art, though accompanied by the production of some of the most wonderful specimens of stone cutting and of constructive skill that ever were produced. This, however, is "building," not architecture; and though it may excite the admiration of the vulgar, it never will touch the feelings of the true artist or man of taste.

This decline of true art had nowhere shown itself during the 13th century, with which we are concerned at present. Then architecture was truly progressive: every man and every class in the country lent his aid, each in his own department, and all worked together to produce those wonderful buildings which still excite our admiration. The masons performed their part, and it was an important one; but neither to them nor to their employers, such as the Abbé Suger, Maurice de Sully, Robert de Lusarches, or Fulbert of Chartres, is the whole merit to be ascribed, but to all classes of the French nation carrying on steadily a combined movement towards a well-defined end.

In the following pages, therefore, it will not be necessary to recur to the freemasons nor their masters—at least not more than incidentally—till we come to Germany. Nor will it be necessary to attempt to define who was the architect of any particular building. The names usually fixed upon by antiquaries after so much search are merely those of the master-masons or foremen of the works, who had nothing to do with the main designs of the buildings.

CHAPTER IX.

FRENCH GOTHIC CATHEDRALS.

CONTENTS.

Paris — Chartres — Rheims — Amiens — Other cathedrals — Later style — St. Ouen's, Rouen.

THE great difficulty in attempting to describe the architecture of France during the glorious period of the 13th century is really the *embarras de richesse*. There are even now some thirty or forty cathedrals of the first class in France, all owing their magnificence to this great age. Some of these, it is true, were commenced even early in the 12th, and many were not completed till after the 14th century; but all their principal features, as well as all the more important beauties, belong to the 13th century, which, as a building epoch, is perhaps the most brilliant in the whole history of architecture. Not even the great Pharaonic era in Egypt, the age of Pericles in Greece, nor the great period of the Roman empire, will bear comparison with the 13th century in Europe, whether we look to the extent of the buildings executed, their wonderful variety and constructive elegance, the daring imagination that conceived them, or the power of poetry and of lofty religious feelings that is expressed in every feature and in every part of them.

During the previous age almost all the greater ecclesiastical buildings were abbeys, or belonged exclusively to monastic establishments—were in fact the sole property, and built only for the use, of the clergy. The laity, it is true, were admitted, but only on sufferance. They had no right to be there, and no part in the ceremonies performed. During the 13th century almost all the great buildings were cathedrals, in the erection of which the laity bore the greater part of the expense, and shared, in at least an equal degree, in their property and purposes. In a subsequent age the parochial system went far to supersede even the cathedral, the people's church taking almost entirely the place of the priest's church, a step which was subsequently carried to its utmost length by the Reformation. Our present subject requires us to fix our attention on that stage of this great movement which gave rise to the building of the principal cathedrals throughout Europe from the 12th to the 15th century.

The transition from the round Gothic to the true pointed Gothic style in the centre of France took place with the revival of the national power under the guidance of the great Abbé Suger, about the year 1144. In England it hardly appeared till the rebuilding of Can-

terbury Cathedral, under the guidance of a French architect, A.D. 1175; and in Germany it is not found till, at all events, the beginning of the 13th century, and can hardly be said to have taken firm root in that country till a century at least after it had been fairly established in France.

The development of particular features will be pointed out as we proceed; but no attempt will be made to arrange the cathedrals and great buildings in chronological order. Such an attempt would merely lead to confusion, as most of them took a century at least to erect—many of them two.

In France, as in England, there is no one great typical building to which we can refer as a standard of perfection—no Hypostyle Hall or Parthenon which combines in itself all the excellences of the style; and we are forced therefore to cull from a number of examples materials for the composition, even in imagination, of a perfect whole. Germany has in this respect been more fortunate, possessing in Cologne Cathedral an edifice combining all the beauties ever attempted to be produced in pointed Gothic in that country. But even this is only an imitation of French cathedrals, erected by persons who admired and understood the details of the style, but were incapable of appreciating its higher principles. The great cathedrals of Rheims, Chartres, and Amiens, are all early examples of the style; and as they were erected nearly simultaneously, none of their architects were able to profit by the experience obtained in the others. Consequently they are all more or less experiments in a new and untried style. The principal parts of the church of St. Ouen at Rouen, on the contrary, are somewhat too late; and beautiful though it is, masonic perfection was then coming to be more considered than the expression either of poetry or of power.

Still in Rheims Cathedral we have a building possessing so many of the perfections and characteristic beauties of the art, that it may almost serve as a type of the earlier style, as St. Ouen may of the later; and though we may regret the absence of the intermediate steps, except in such fragments as the Sainte Chapelle at Paris, still between them we may obtain a tolerably clear idea of the form to which French art aspired during its most flourishing age.

To avoid as far as may be possible the tediousness of repetition necessary, if the attempt were made, to describe each building separately, and at the same time not to fall into the confusion that must result from grouping the whole together, the most expedient mode will perhaps be, to describe first the four great typical cathedrals of Paris, Chartres, Rheims, and Amiens, and then to point out briefly the principal resemblances and differences between these and the other cathedrals of France.

Of these four, that of Paris is the oldest; the foundation-stone having been laid 1163, and the work carried on with such activity by the bishop, Maurice de Sully, that the high altar was dedicated 1182, the interior completed 1208, and the west front finished about the year 1214.

The history of the cathedral of Chartres is not so easily made out. An important church was erected here by Bishop Fulbert in the beginning of the 11th century, of which building scarcely anything now remains but the piers of the western doors.

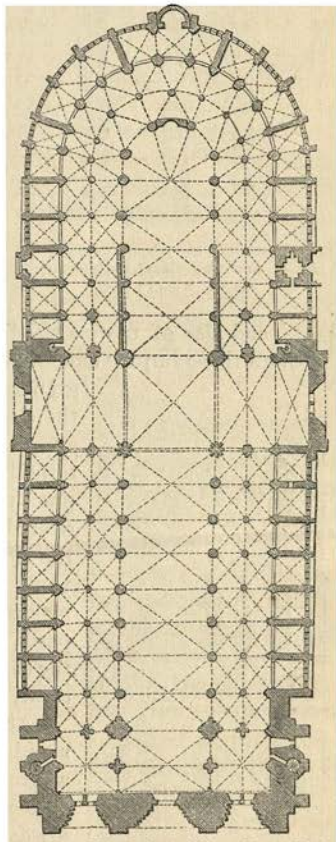
The building of the present church seems to have been commenced about a century after the completion of the older building, for the great western towers were in progress in the year 1145, and the new choir must have been commenced very shortly afterwards. Indeed, the greater part of the building belongs to the latter half of the 12th century, or very early in the 13th; but it was not completed till the year 1260.

The cathedral of Rheims was commenced in the year 1211, immediately after a fire which consumed the preceding building, and under the auspices of Archbishop Alberic de Humbert,—Robert de Couci acting as trustee on the part of the laity. It was so far completed in all essential parts as to be dedicated in 1241.

Amiens Cathedral was commenced in 1220, and completed in 1257; but being partially destroyed by fire the year afterwards, the clerestory and all the upper parts of the church were rebuilt. The whole seems to have been completed, nearly as we now find it, about the year 1272. From this period to the building of the choir of St. Ouen, at Rouen, 1318–1339, there is a remarkable deficiency of great examples in France. The intermediate space is very imperfectly filled by the examples of St. Urbain at Troyes, St. Benigne at Dijon, and a few others. These are just sufficient to show how exquisite the style then was, and what we have lost by almost all the cathedrals of France having been commenced simultaneously, and none being left to benefit by the experience of their predecessors.

Though the plans of these cathedrals differ to some extent, their dimensions are very nearly the same; that at—

Paris, covering about . .	64,108 feet.
Chartres	68,260 ,,
Rheims	67,475 ,,
Amiens	71,208 ,,

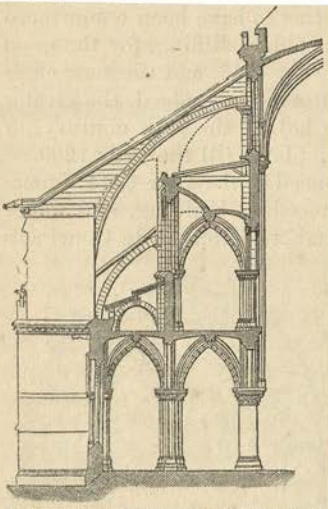


535. Plan of Cathedral of Notre Dame, Paris. From Chapuy, Moyen Age Monumental. Scale 100 ft. to 1 in.

These dimensions, though inferior to those of Cologne, Milan, Seville, and some other exceptional buildings, are still as large as those of any erected in the middle ages.

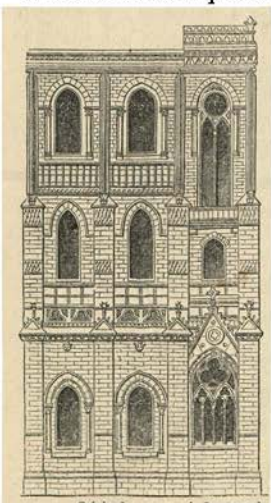
The cathedral of Paris was designed at a time when the architects

had not obtained that confidence in their own skill which made them afterwards complete masters of the constructive difficulties of the design. As shown in the plan (woodcut No. 535), the points of support are far more numerous and placed nearer to one another than is usually the case; and as may be seen from the section, instead of two tall stories, the height is divided into three, and made up, if I may so express it, of a series of cells built over and beside each, so as to obtain immense strength with a slight expenditure of materials.



536. Section of Side Aisles, Cathedral of Paris. From Gailhabaud, Architecture. Scale 50 feet to 1 inch.

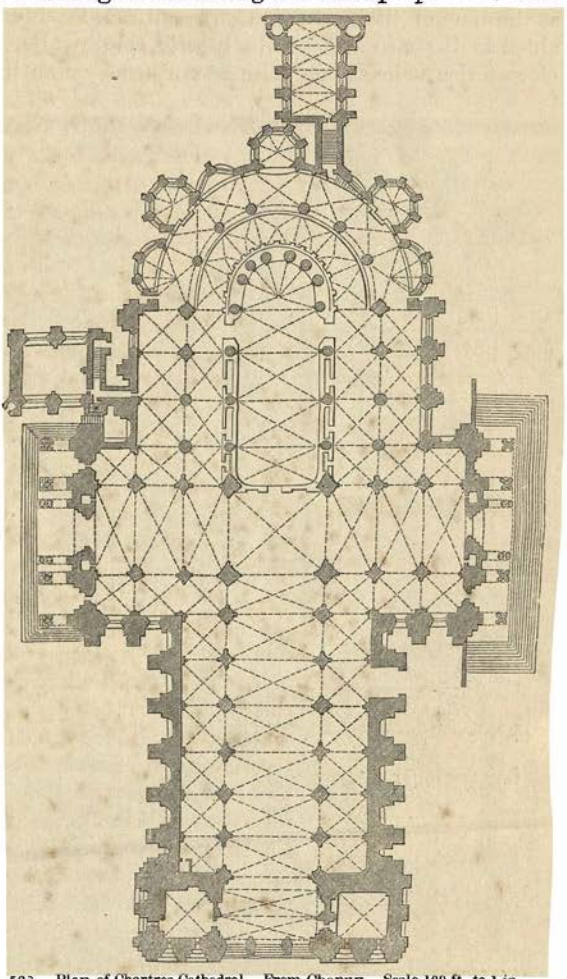
It must at the same time be confessed that this result was obtained with a considerable sacrifice of grandeur and simplicity of effect. Even before the building was completed, the architects seem to have become aware of these defects; and as is shown in the woodcut (No. 537), the simple undivided windows of the clerestory were cut down so as to give them the greatest possible height, and the roof of the upper gallery made flat to admit of this; and eventually larger windows were introduced between the buttresses, so as to get fewer and larger parts, and also of course to admit of larger surfaces for painted glass. With all these improvements the cathedral has not internally the same grandeur as the other three, though externally there is a very noble simplicity of outline, and appearance of solidity in the whole design. Internally it still retains, as may be seen from the plan, the hexapartite arrangement in its vaults over the central aisle, and the quadripartite in the side aisles only. This causes the central vault to overpower those on each side, and makes not only the whole church, but all the parts, look much smaller than would have been the case had the roof been cut into smaller divisions, as was always done afterwards.



537. External Elevation, Cathedral of Paris. From Gailhabaud. Scale 50 feet to 1 inch.

At Chartres most of these defects were avoided; there is there a fewness of parts and a grandeur of conception seldom surpassed. The great defect of proportion in that building arises from the circumstance that the architect included the three aisles of the old church in the central aisle of the present one. At that time that daring perfection of execution had not been acquired which afterwards enabled the vaults to be carried to so astonishing a height. At Chartres the pro-

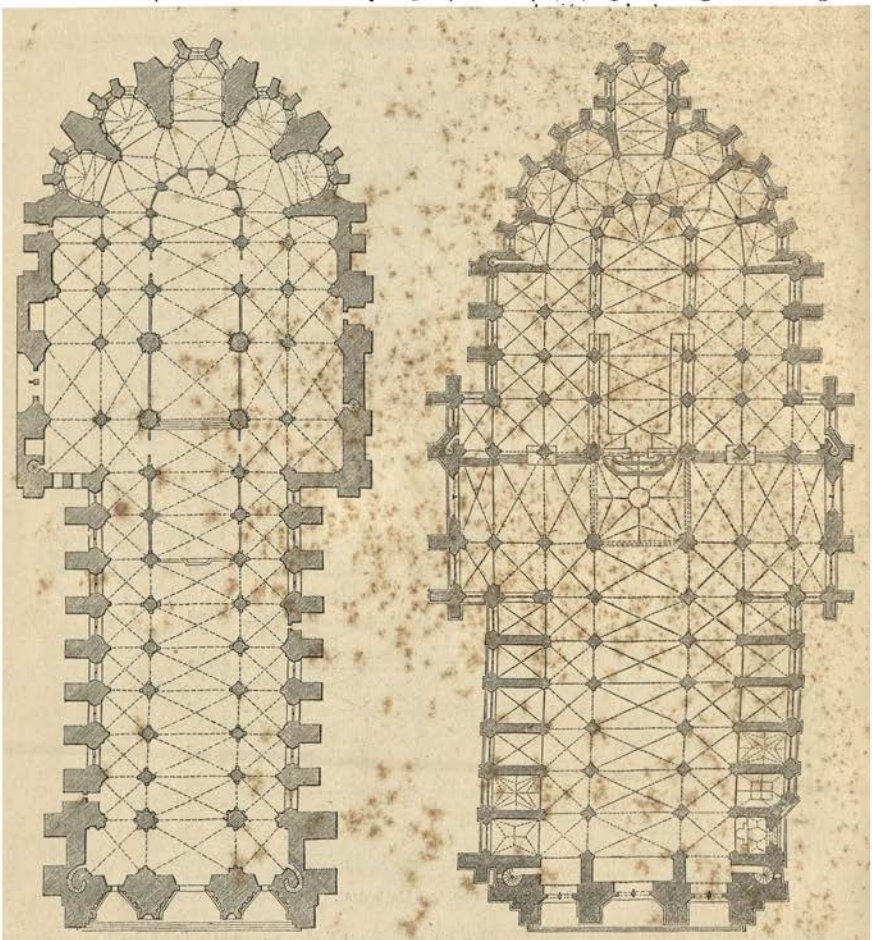
portion of width to height is nearly as one to two, the breadth of the central nave being nearly 50 ft., and the height only 106. With the great length of such buildings found in England such proportions were tolerable, but in the shorter French cathedrals it gives an appearance of lowness which is far from being pleasing; and as the painted glass has been almost entirely removed from the nave, a cold glare now pervades the whole, which renders it extremely difficult to judge of the original effect.



538. Plan of Chartres Cathedral. From Chapuy. Scale 100 ft. to 1 in.

Most of those defects were avoided by the builders of the cathedral at Rheims, and nothing can exceed the simple beauty and perfection of the arrangement of the plan, as well as of the general harmony of all the parts. The proportion, both in width and height, of the side aisles to the central nave, and the absence of side chapels or any subsequent additions, render the nave one of the most perfect in France. The mode in which the church expands as you approach the choir, and the general arrangement of the eastern part, as shown in the plan (woodcut No. 539), are equally excellent, and surpassed by no building of the middle ages. The piers are perhaps a little heavy, and their capitals want simplicity; the triforium is perhaps too plain; and at the present day the effect of the church is in one respect reversed, inasmuch as the clerestory retains its painted glass, which in the side aisles has been almost totally destroyed. In consequence of this, it has the effect of being lighted from below—an arrangement highly destructive of

architectural beauty. Notwithstanding all this, it far surpasses those buildings which preceded it, and is only equalled by Amiens and those completed afterwards, which, taking advantage of the introduction just at the time of their erection of complicated window tracery, were enabled to dispense almost wholly with solid walls, and to render their clerestories at least one blaze of gorgeous colouring—the glass being



539. Plan of Rheims Cathedral. Scale 100 feet to 1 inch.

From Chapuy.

540. Plan of Amiens Cathedral. Scale 100 feet to 1 inch.

disposed in the most beautiful forms, and framed in stone, so as to render it, notwithstanding its extent, still an integral part of the whole building. In this respect the great height of the clerestory at Amiens, and its exceeding lightness, give it an immense advantage over the preceding churches, although this is gained at the sacrifice, to a certain extent, of the sober and simple majesty of the earlier examples. There is nevertheless so much beauty and so much poetry in the whole effect

that it is scarcely fair to apply the cold rules of criticism to so fanciful and fascinating a creation.

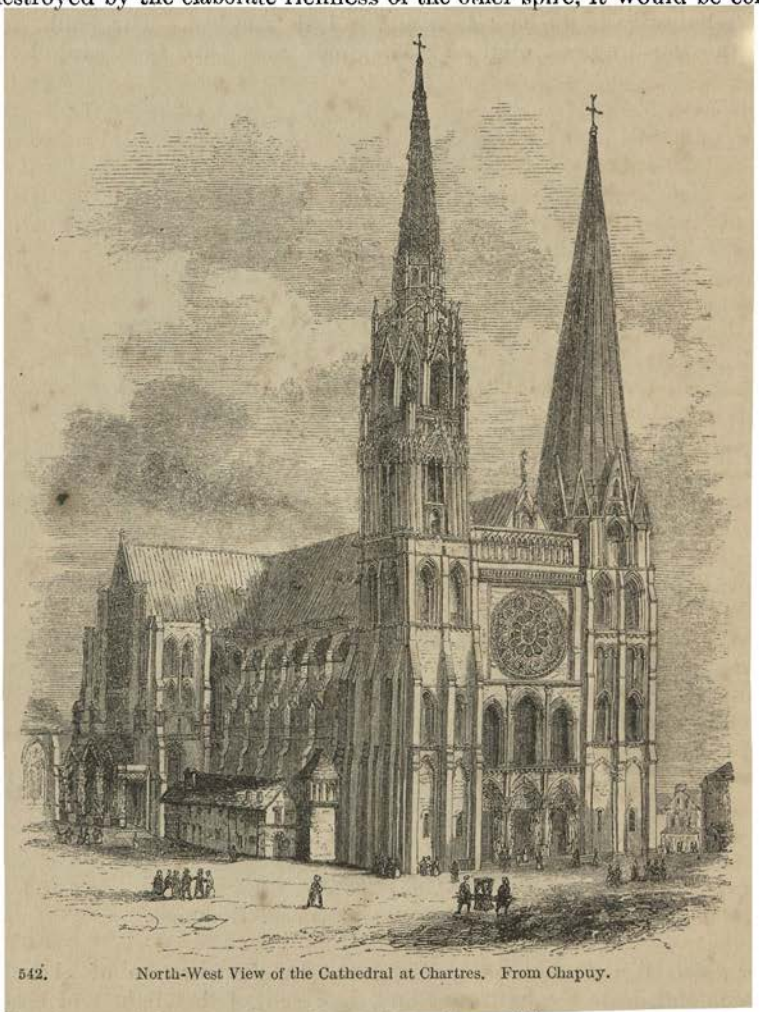
Externally the same progress is observable in these four cathedrals as in their interior arrangements. The façade of the cathedral at Paris is simple in its outline, and bold and majestic in all its parts, and though perhaps a little open to the charge of heaviness, it is admirably adapted to its situation, and both in design and proportion fits admirably to the church to which it is attached. The flanks too of the building, as originally designed, must have been singularly

511. View of the Façade of the Cathedral at Paris. From Chapuy.

beautiful, for, though sadly disfigured by the insertion of chapels, which obliterate the buttresses and deprive it of that light and shade so indispensable to architectural effect, even now there is a simplicity in its outline, and an elegance in the whole form of the building, that has not often been excelled in Gothic structures.

The lower part of the façade at Chartres is older than that of Paris, and so plain (it might almost be called rude) as hardly to admit of comparison with it; but its two spires, of different ages, are unsur-

passed in France. Even in the southern or older of the two, which was probably finished in the 12th century, we find all the elements which were so fully developed in Germany and elsewhere in the following centuries. The change from the square to the octagon, and from the perpendicular part to the sloping sides of the spire, are managed with the most perfect art; and were not the effect it produces destroyed by the elaborate richness of the other spire, it would be considered one of the most beautiful of its class. The new or northern spire was erected by Jean Texier between the years 1507 and 1514. Notwithstanding the lateness of its date, this must be considered as on the whole the most beautiful spire on the continent of Europe—certainly far surpassing those at Strasburg, Vienna, or Antwerp. If it has a rival it is that at Freiburg, or those designed for the cathedral



542. North-West View of the Cathedral at Chartres. From Chapuy.

at Cologne; but with details of the same date, I have no doubt that this would be considered the finest spire of the three.[1]

The transepts at Chartres have more projection than those of Paris, and were originally designed with two towers to each, and two others were placed one on each side of the choir; so that the cathedral would have had eight towers altogether if completed; but none except the western two have been carried higher than the springing of the roof; and though they serve to vary the outline, they do not relieve, to the extent they might have done, the heavy mass of the roof. In other respects the external beauty of the cathedral is somewhat injured by the extreme massiveness of the flying buttresses, which were deemed necessary to resist the thrust of the enormous vault of the central nave; and, though each is in itself a massive and beautiful object, they crowd to an inconvenient extent the clerestory; the effect of which is also somewhat injured by the imperfect tracery of the windows, each of which is more like separate openings grouped together than one grand and simple window.

543. Buttress at Chartres. From Batissier, Histoire de l'Art.

544. Buttresses at Rheims. From Chapuy.

The progress that took place between this building and that at Rheims is more remarkable on the exterior than even in the interior. The façade of that church, though small as compared with some others, was perhaps the most beautiful structure produced during the middle ages; and, though it is difficult to institute a rigorous comparison between things so dissimilar, there is perhaps no façade, either of ancient or of modern times, that surpasses it in beauty of proportion and details, or in fitness for the purpose for which it was designed. Nothing can exceed the majesty of its deeply-recessed triple portals, the beauty of the rose-window that surmounts them, the elegance of the gallery that completes the façade and serves as a basement to the light and graceful towers that crown the composition. These were designed to carry spires, no doubt as elegant and appropriate as themselves; but this part of the design was never

[1] The height of the old spire is 342 ft. 6 in. with the cross; of the new, 371 ft.

completed. The beautiful range of buttresses which adorn the flanks of the building are also perhaps the most beautiful in France, and carry the design of the façade back to the transepts. These are later and less ornate than the western front, but are still singularly beautiful, though wanting the two towers designed to ornament each of them. On the intersection of the nave with the transepts there rose at one time a spire of wood, probably as high as the intended spires of the western towers, and one still crowns the ridge of the chevet, rising to half the height above the roof that the central one was intended to attain. Were these all complete, we should have the beau ideal externally of a French cathedral, with two western and one central spire, and four towers at the ends of the transepts. All these perhaps never were fully completed in any instance, though the rudiments of the arrangement are found in almost all the principal French cathedrals. In some, as for instance at Rouen, it was carried out in number, though of such different ages and design as to destroy that unity of effect essential to perfect beauty.

The external effect of Amiens may be taken rather as an example of the defects of the general design of French cathedrals than as an illustration of their beauties. The western façade presents the same general features as those of Paris and Rheims, but the towers are so small in proportion to the immense building behind as to look mean and insignificant, and all the parts of the design are so badly put together as to lose in a great measure the effect they were designed to produce. The northern tower is 223 ft. high, the southern 205; both therefore are higher than those at York, but instead of being appropriate and beautiful adjuncts to the building they are attached to, they only serve here to exaggerate the gigantic incubus of a roof, 208 ft. in height, which overpowers the building it is meant to adorn.

The same is true of the central spire, which, though higher than that at Salisbury, being 422 ft. high from the pavement, is reduced from the same cause to comparative insignificance, and is utterly unequal to the purpose of relieving the heaviness of outline for which this cathedral is remarkable. The filling up of the spaces between the buttresses of the nave with chapels prevents the transepts from having their full value, and gives an awkward fulness to the design of the whole.

All French cathedrals are more or less open to these objections, and want in consequence that exquisite variety of outline and play of light and shade for which the English examples are so remarkable; but it still remains a question how far the internal loftiness and the glory of their painted glass compensate for these external defects. The truth perhaps would be found in a mean between the two extremes, which has not unfortunately been attained in any one example.

Besides the character imparted to the buildings by mass and beauty of outline, we must look more closely at the details, and see how far the general effect was necessarily sacrificed for particular purposes.

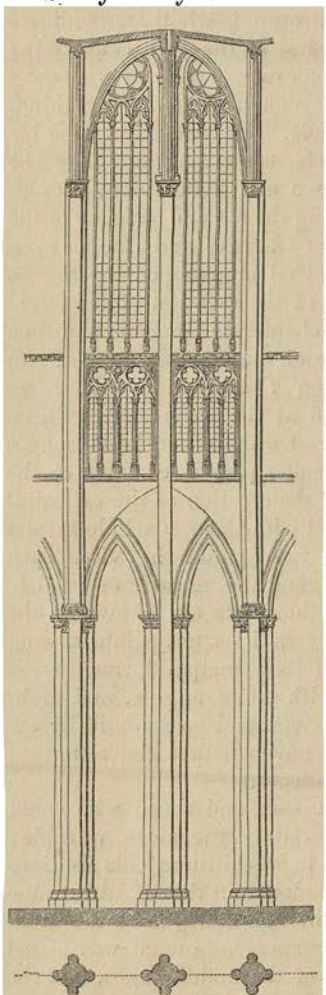
What painted glass was to the interior of a French cathedral, sculpture was to the exterior. Almost all the arrangements of the

façade were modified mainly to admit of its display to the greatest possible extent. The three great cavernous porches of the lower part would be ugly and unmeaning in the highest degree without the sculptures that adorn them. The galleries above are mere ranges of niches, as unmeaning without their statues as the great mullioned windows without their "storied panes." In such lateral porches too, as those for instance at Chartres, the architecture is wholly subordinate to the sculpture; and in a perfect cathedral of the 13th century the buttresses, pinnacles, even the gargoyles, every "coin of vantage," tells its tale by some image or representation of some living thing, giving meaning and animation to the whole. The cathedral thus became an immense collection of sculptures, containing not only the whole history of the world as then known and understood, but also an immense number of objects representing the art and science of the middle ages. Thus the great cathedrals of Chartres and Rheims even now retain some 5000 figures, scattered about or grouped together in various parts, beginning with the history of the creation of the world and all the wondrous incidents of the 1st chapter of Genesis, and then continuing the history through the whole of the Old Testament. In these sculptures the story of the redemption of mankind is told, as set forth in the New, with a distinctness, and at the same time with an earnestness, almost impossible to surpass. On the other hand, ranges of statues of kings of France and other popular potentates carry on the thread of profane history to the period of the erection of the cathedral itself. Besides these we have, interspersed with them, a whole system of moral philosophy, as illustrated by the virtues and the vices, each represented with an appropriate symbol, and the reward or punishment its invariable accompaniment. In other parts are shown all the arts of peace, every process of husbandry in its appropriate season, and each manufacture or handicraft in all its principal forms. Over all these are seen the heavenly hosts, with saints, angels, and archangels. All this is so harmoniously contrived and so beautifully expressed, that it becomes a question even now whether the sculpture of these cathedrals does not excel the architecture.

In the middle ages, when books were rare, and those who could read them rarer still, the sculpture was certainly the more valuable; but, as Victor Hugo beautifully expresses it, "Ceci tuera cela: le livre tuera l'Eglise." The printing-press has rendered all this of little value to the present generation, and it is only through the eyes of the artist or the antiquarian that we can even dimly appreciate what was actual instruction to the less-educated citizens of the middle ages, and the medium through which they learned the history of the world, or heard the glad tidings of salvation conveyed from God to man. All this few, if any, can fully enter into now, but without feeling it to at least some extent it is in vain to attempt to appreciate these wonderful buildings. In the middle ages the sculpture, the painting, the music of the people were all found in the cathedrals, and there only. Add to this their ceremonies, their sanctity, especially that conferred by the relics of saints and martyrs which they contained—all these things made

these buildings all in all to those who erected them and to those who worshipped in them.

The cathedral of Beauvais is generally mentioned in conjunction with that of Amiens, and justly so, not only in consequence of its local proximity, and its being so near it in date, but also from a general similarity in style. Beauvais is in fact an exaggeration of Amiens, and shows defects of design more to be expected in Germany than in France. It was commenced 5 years later than Amiens, or in 1225, and the works were vigorously pursued between the years 1249 and 1267. The dedication did not take place till 1272. The architects, in their rivalry of their great neighbour, seem to have attempted more than they had skill to perform, for the roof fell in in 1284, and when rebuilt, additional strength was given by the insertion of another pier between every two of those in the old design, which served to exaggerate the apparent height of the pier-arches. Emboldened by this, they seem to have determined to carry the clerestory to the unprecedented height of 150 ft., or about three times the width, measuring from the centre of one pier to that of the next. This, with a very long nave, a very acute vault, wide pier-spaces, and bold massive supports, might have been not only tolerable, but sublime; but as this cathedral wants all these qualities, the effect now is only that of a most extraordinary masonic *tour de force*, which, though productive of considerable wonderment among the gaping vulgar, is defective in taste and unpleasing.

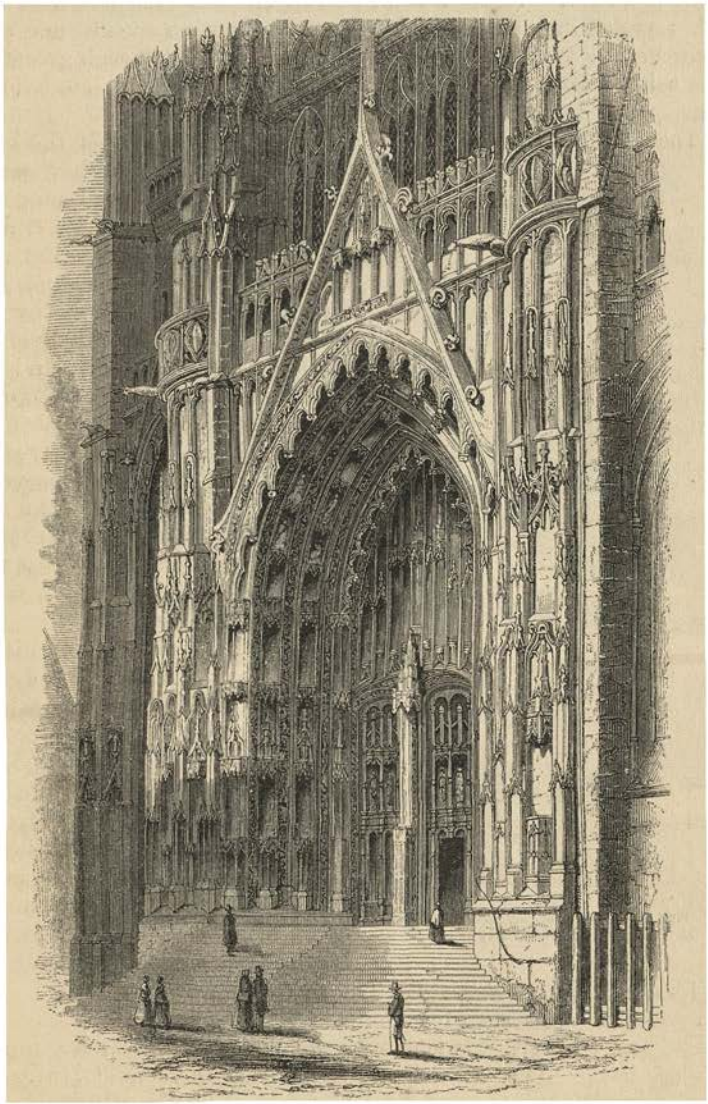


545. Bay of Nave of Beauvais Cathedral. No scale.

These defects moreover were considerably increased by the late period at which the greater part of it was built. The south transept was commenced only in 1500; the northern one 30 years later, and only finished in 1537; but even this hardly gives the date of the details, for in 1555 the architects of the building being seized with a desire of rivalling the dome of St. Peter's at Rome, which was then the object of universal admiration, undertook the construction of a spire on the intersection of the transepts, which they completed in 13 years, but which stood only 5 years from that time, having fallen down on the day of the Ascension in the year 1573. This accident so

damaged the works under it as to require considerable reconstruction, which is what we see now. This spire, of which the original drawings still exist, was 486 ft. in height; and although, as might be expected from the age in which it was erected, not of the purest design, must still have been a very noble and beautiful object, hardly inferior to that of Chartres, which was only half a century earlier.

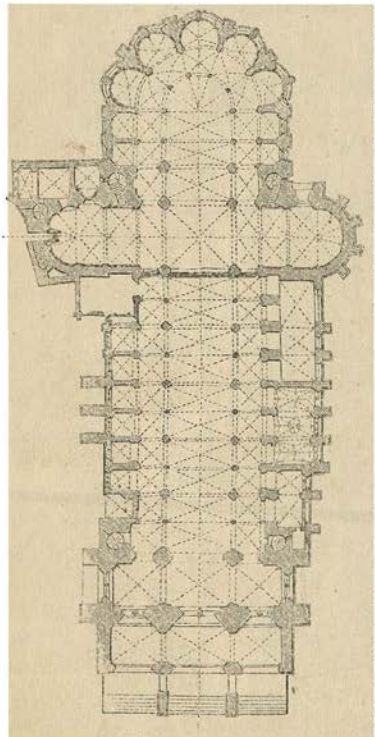
Taken altogether, the cathedral of Beauvais may be considered as an example of that "vaulting ambition that o'erleaps itself." Every principle of Gothic art is here carried to an extreme which destroys



546. Doorway, South Transept, Beauvais. From Chapuy.

the aim for which it was designed, and not only practically has caused the ruin of the building and prevented its completion, but has so far destroyed its artistic effect as to make it an example of what should be avoided rather than of what should be followed. It has all that want of repose and solidity which has often been made the reproach of Gothic architecture. Notwithstanding its size it has no majesty; and though it has stood so long it has a painful appearance of instability: its whole construction looks like props applied to prevent its falling, rather than, as in the earlier buildings, additional strength insuring durability. Even its details, as shown in the woodcut No. 546, representing one of the transepts, show an attenuation and meagreness very unusual in French architecture, and, though graceful, have neither the power of the earlier nor the richness characteristic of contemporary buildings.

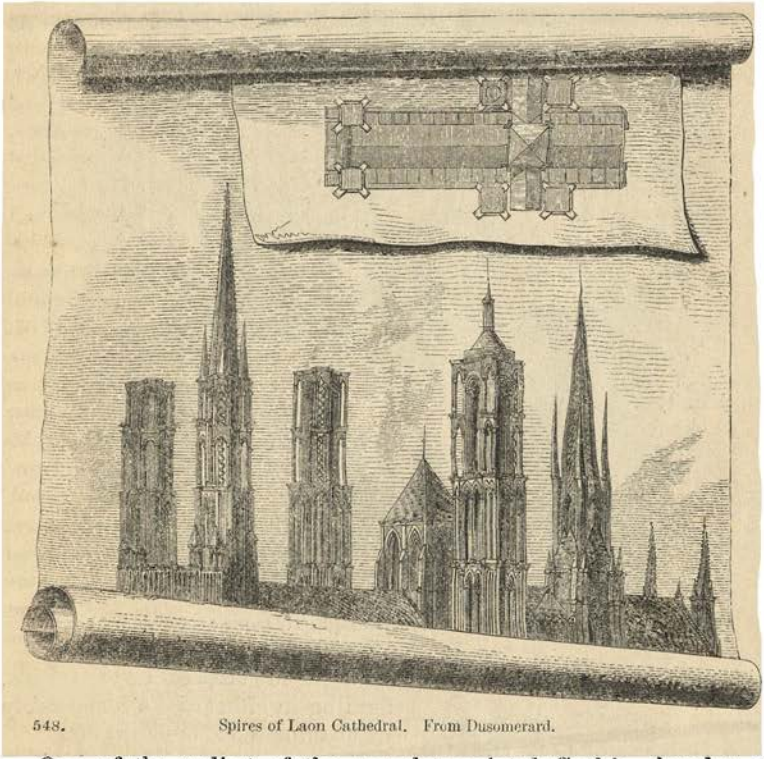
The cathedral of Noyon is an earlier example, and one of the best and most elegant transition specimens in France, having been commenced about the year 1137, and completed, as we now see it, in 1167. Here the circular arch had not entirely disappeared. This was owing to its early date, and to its situation near the German border, and its connection with the see of Tournay, with which it was long united. Like the sister church at that place, it was triapsal, which gave it great elegance of arrangement. The one defect of this form seems to be, that it does not lend itself easily to the combination of towers, which were then so much in vogue.



547. Plan of Cathedral at Noyon. From Ramée's Monographie. Scale 100 feet to 1 inch.

In singular contrast to this is the neighbouring cathedral of Laon, one of the very few in France which have no chevet. It terminates with a square east end, like an English church, except that it has there a great circular window only instead of the immense wall of glass usually adopted in this country. In style it more resembles the cathedral of Paris than any other, though covering less ground and smaller in all its features. Its great glory is its crowning group of towers. The two western (with the exception of their spires) and the two at the end of the northern transept are complete. On the southern side only one has been carried to its full height, and the central lantern is now crowned by a low pyramidal roof instead of the tall spire that

must once have adorned it; but even as they now are, the six that remain, whether seen from the immediate neighbourhood of the building, or from the plain below—for it stands most nobly on the flat top of a high isolated hill—have a highly picturesque and pleasing effect, and notwithstanding the rudeness of some of its details, and the deficiency of sculpture, it is in many respects one of the most interesting of the cathedrals of France.

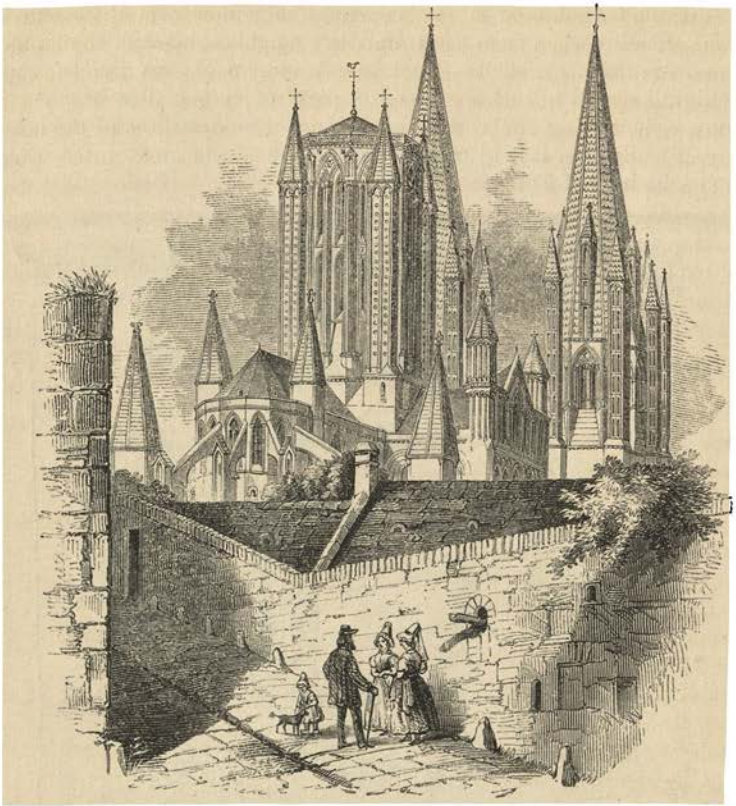


548. Spires of Laon Cathedral. From Dusomerard.

One of the earliest of the complete pointed Gothic churches of France is that of Coutances (woodcut No. 549), the whole of which belongs to the first half of the 13th century, and though poor in sculpture, makes up for this to some extent by the elegance of its architectural details, which are unrivalled or nearly so in France.

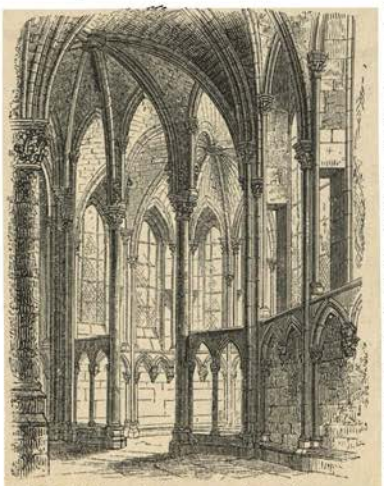
Externally it possesses two western spires, and one octagonal lantern over the intersection of the nave and transept, which, both for beauty of detail and appropriateness, is the best specimen of its class, and only wants the crowning spire to make this group of towers equal to anything on this side of the Channel.

Notre Dame de Dijon is another example of the same early and elegant age, but possessing the Burgundian peculiarity of a deeply recessed porch or narthex, surmounted by a façade of two open galleries, one over the other, exactly in the manner of the churches of Pisa and Lucca of the 11th and 12th centuries, of which it may be considered an imitation. It is, however, as unsatisfactory in pointed Gothic, even



549. View of Cathedral at Coutances. From Transactions of Institute of British Architects.

with the very best details, as it is in the pseudo-classical style of Pisa, forming in either case a remarkably unmeaning mode of decoration.

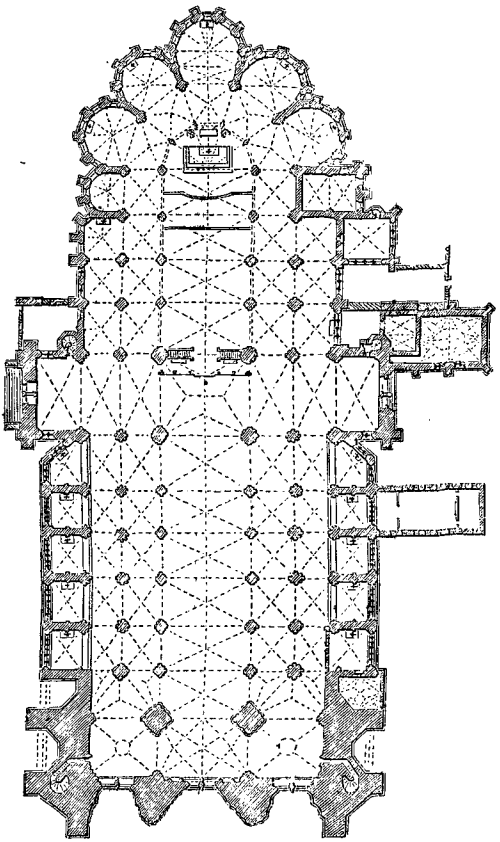


550. Lady Chapel, Auxerre. From Chapuy.

The cathedrals of Sens and Auxerre are pure examples of pointed architecture. The latter (A.D. 1213) internally rivals perhaps even Coutances. Nothing can be more elegant than the junction of the lady chapel here with the chevet; for though this is almost always pleasingly arranged, the design has been unusually successful in this instance. The two slender shafts, shown in the woodcut No. 550, just suffice to give it pre-eminence and dignity, without introducing any feature so large as to disturb the harmony of the whole.

In the great church at St. Quentin, the five chapels of the chevet have each two pillars, arranged similarly to these of the lady chapel at Auxerre; and though the effect is rich and varied, the result is not quite so happy as in this instance. Taken altogether, few chevets in France are more perfect and beautiful than this almost unknown example.

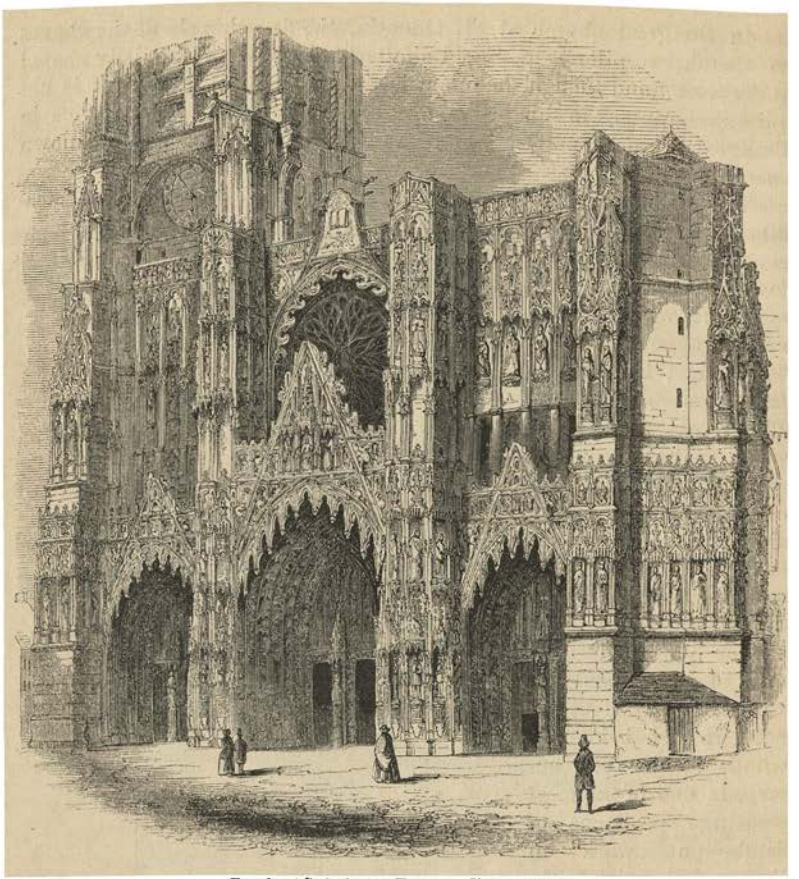
The cathedral of Troyes, commenced in 1206, and continued steadily for more than three centuries, is one of the few in France designed originally with five aisles and a range of chapels. The effect, however, is far from satisfactory. The great width thus given makes the whole appear low, and the choir wants that expansion and dignity which is so pleasing at Rheims and Chartres. Still the details and design of the earlier parts are good and elegant; and the west front (woodcut No. 552), though belonging wholly to the 16th century, is one of the most pleasing specimens of flamboyant work in France, being rich without exuberance, and without the bad taste that sometimes disfigures works of this class and age.



551. Plan of Cathedral at Troyes. From Arnaud, Voyage dans le Département de l'Aube. Scale 100 feet to 1 inch.

Soissons is perhaps the most pleasing of all these churches. Nothing can surpass the justness of the proportions of the central and side aisles both in themselves and to one another. Though the church is not large, and principally of that age—the latter half of the 13th century—in which the effect depended so much on painted glass, now destroyed or disarranged, it still deserves a place in the first rank of French cathedrals.

The two cathedrals of Toul and Tours present many points of great beauty, but their most remarkable features are their western façades, both of late date, each possessing two towers terminating in octagonal lanterns, with details verging on the style of the Renaissance, and yet



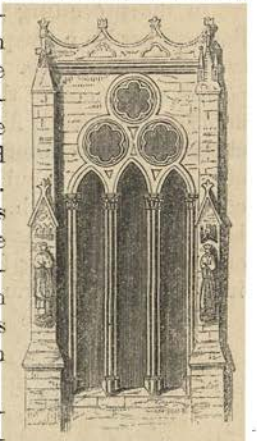
552. Façade of Cathedral at Troyes. From Arnaud.

so Gothic in design and so charmingly executed as almost to lead us to believe, in spite of the fanciful extravagance which it displays, that the architects were approaching to something new and beautiful when the mania for classical details overtook them.

The two cathedrals of Limoges and Dijon belong to the latter half of the 13th century, and will consequently when better known fill a gap, painfully felt in the history of the art.

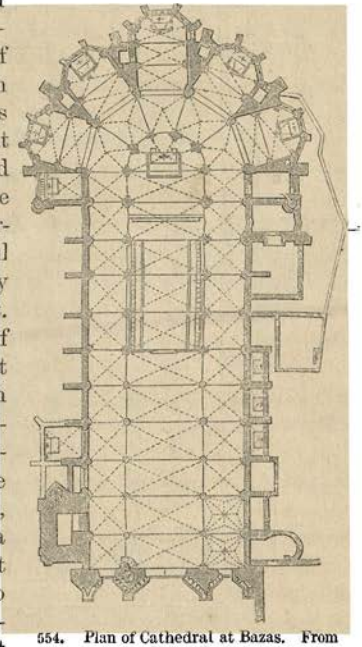
It would be tedious to enumerate all the great cathedrals of this country, or to attempt to describe their peculiarities; but we must not omit all mention of such as Lisieux, remarkable for its beautiful façade, and Evreux, for the beauty of many of its parts, though the whole is too much a patchwork to produce a pleasing effect. Nevers, too, is remarkable as being one of the only two double apse cathedrals in France, Besançon being the other. At Nevers this was owing to the high altar having been originally at the west, a defect felt to be intolerable in the 16th century, when the church was rebuilt, but which was done without destroying the old sanctuary. Bordeaux, already

mentioned for its noble nave without aisles, possesses a chevet worthy of it, and two spires of great beauty at the ends of the transepts, the only spires so placed, I think, in France. Autun possesses a spire on the intersection of the nave with the transepts as beautiful as anything of the same class elsewhere. The cathedral of Lyons is interesting, as showing how hard it was for the Southern people of France to shake off their old style and adopt that of their Northern neighbours. With much grandeur and elegance of details, it is still so clumsy in design, that neither the whole nor any of its parts can be considered as satisfactory. The windows, for instance, as shown in the woodcut (No. 553), look more like specimens of the carpenter's Gothic of modern times than examples of the art of the middle ages.



553. Window of Cathedral at Lyons. From Peyre, Manuel de l'Architecture.

There still remains to be mentioned the cathedral at Rouen. This remarkable building possesses parts belonging to all ages, and exhibits most of the beauties, and also, it must be confessed, most of the defects of the style. It was erected with a total disregard to all rule, yet so splendid and so picturesque that we are almost driven to the wild luxuriance of nature to find anything to which we can compare it. Internally its nave, though rich, is painfully cut up into small parts. The undivided piers of the choir, on the contrary, are too simple for their adjuncts. Externally, the transept towers are beautiful in themselves, but are overpowered by the richness of those of the west front. The whole of that façade, in spite of the ruin of some of its most important features, and the intrusion of much modern vulgarity, may be called a romance in stone, consisting of a profusion of the most playful fancies. Like most of the cathedrals near our shores, that of Rouen was designed to have a central spire; this, however, was not completed till late in the cinque-cento age, and then only in vulgar woodwork, meant to imitate stone. That being destroyed, an attempt has lately



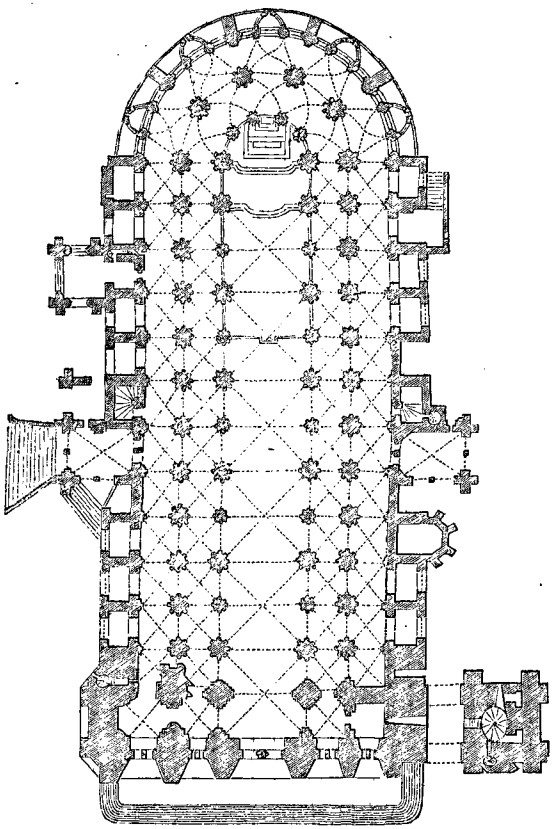
554. Plan of Cathedral at Bazas. From Lamothe.[1]
Scale 100 feet to 1 inch.

[1] Compte Rendu des Travaux de la Commission des Monumens, &c.: Rapport présenté au Préfet de la Gironde, 1848 *et seq.*

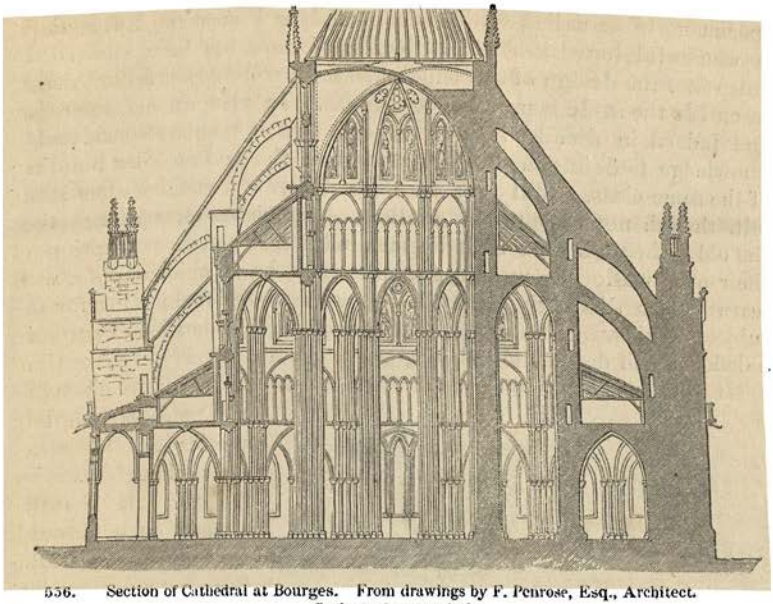
been made to replace it by still more vulgar iron-work, leaner and poorer than almost anything else of modern times.

In the preceding pages, all mention of the cathedrals of Bazas and Bourges has been purposely omitted, because they belong to a different type from the above. The first (woodcut No. 554) is one of the most perfect specimens of the pure Gothic style in the south of France. Its noble triple portal, filled with exquisite sculpture, and its extensive chevet, make it one of the most beautiful of its class. It shows no trace of a transept, a peculiarity, as before pointed out, by no means uncommon in the South. This, though a defect as far as external effect is concerned, gives great value to the internal dimensions, the appearance of length being far greater than when the view is broken by the intersection of the transept.

This is still more striking at Bourges, where the cathedral, though one of the finest and largest in France, covering 73,170 square feet, is still one of the shortest, being only 405 ft. in extreme length; yet, owing to the central aisle being wholly unbroken, it appears one of the longest, as it certainly is one of the most majestic of all. This cathedral possesses also another Southern peculiarity of more questionable advantage, in having five aisles in three different heights. The section (woodcut No. 556) will explain this. The central aisle is 117 ft. in height, those next to it 66 ft. high, the two outer only 28. These last appear to destroy the harmony of the whole, for on an inspection of the building, the outer aisles do not appear to belong to the design, but look more like afterthoughts. At Milan, Bologna, and other places in Italy, where this gradation is common, this



555. Plan of Cathedral at Bourges. From Girardot, Description de la Cathédrale. Scale 100 feet to 1 inch.



556. Section of Cathedral at Bourges. From drawings by F. Penrose, Esq., Architect. Scale 50 feet to 1 inch.

mistake is avoided, and the effect proportionably increased; and except that it does not admit of such large window spaces, I am not quite sure if such a method would not be preferable to the usual one. This arrangement of the aisles was never again fairly tried in France; but even as it is, the cathedral of Bourges must rank after the four first mentioned as the finest and most perfect of the remaining edifices of its class in that country. It is singularly beautiful in its details, and happy in its main proportions; for owing to the omission of the transept, the length is exquisitely adapted to the other dimensions. Had a transept been added, at least 100 ft. of additional length would have been required to restore the harmony; and though externally it would no doubt have gained by such an adjunct, this gain would not have been adequate to the additional expense incurred.

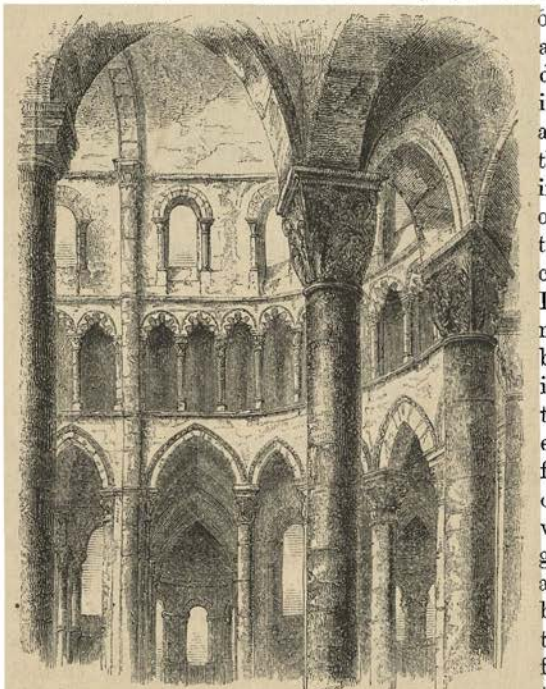
The greater part of the western façade of this cathedral is of a later date than the building itself, and is extended beyond the proportions required for effect so as to overpower the rest of the building, so that it is only from the sides or the eastern end that all the beauty of this church can be appreciated.

As far as regards size or richness of decoration, the cathedral of Orleans deserves to rank as one of the very first in France, and is remarkable as the only Gothic cathedral erected in Europe since the middle ages. The original church on this site having been destroyed by the Calvinists, the present building was commenced in the year 1601 by Henry IV. of France, and although the works proceeded at first with great vigour, and the work was never wholly discontinued, it is even now hardly completed.

Considering the age in which it was built, and the contemporary

specimens of so-called Gothic art erected in France and England, it is wonderful how little of classical admixture has been allowed to creep into the design of this building, and how nearly it follows in all essentials the style it professes to imitate. In plan, in arrangement, and indeed in details, it is so correct, that it requires considerable knowledge to define the difference between this and an older building of the same class. Still there is a wide difference, which makes itself felt, though not easy to be described. It consists in the fact that the old cathedrals were built by men who had a true perception of their art; while the modern example only bears evidence of a well learnt lesson distinctly repeated, but without any real feeling for the subject. This want betrays itself in an unmeaning repetition of parts, in a deficiency of depth and richness, and a general poverty of invention.

It would not be difficult to select out of the collegiate churches of France as complete a series as of the cathedrals, though inferior in size. But having already gone through the one class of buildings, we must confine ourselves to a brief notice of the other. The church of Charité sur Loire was one of the most picturesque and beautiful in France. It is now partially ruined, though still retaining enough of its original features to illustrate clearly the style to which it belongs. Originally the church was about 350 ft. in length by 90 in breadth. One tower of the western front, one aisle, and the whole of the choir still remain, and belong without doubt to the church dedicated in 1106 by Pope Pascal. The presence of the pointed form in the pier arches and vaults has induced some to believe that it belongs to the age of Philip Augustus, about a century later, when the church was restored after a great fire. Its southern position, however, the circumstance of its being the earliest daughter church of the abbey of Cluny, and the whole style of the building are proofs of its earlier age. All the decorative parts, and all the external openings, still retain the circular form as essentially as if the other had never been invented.



557. View in the Choir of Charité sur Loire. From a sketch by the Author.

The most remarkable feature in this church is the exuberance of ornament with which all the parts are decorated, so very unlike the massive rudeness of the contemporary Norman or Northern styles. The capitals of the pillars, the arches of the triforium, the jambs of the windows and the cornices, all show a refinement and love of ornament characteristic of a far more advanced and civilized people than those of the northern provinces of France.

Among those who were present at the dedication of this church was the Abbé Suger, then a gay young man of 20 years of age, who about 30 years later in the plenitude of his power commenced the building of the abbey of St. Denis, near Paris, the west front of which was dedicated in the year 1140, and the rest of the church built "stupendâ celeritate," and dedicated in 1144. This, though certainly not the earliest, may be considered as the typical example of the earliest pointed Gothic in France. It terminated the era of transition, and fixed the epoch when the Northern pointed style became supreme, to the total exclusion of the round arched style that preceded it. The effect of Suger's church is now destroyed by a nave of the 14th century—of great beauty it must be confessed—which is interpolated between the western front and the choir, both which remain in all essentials as left by him, and enable us to judge without a doubt of the state of the art at the time of the dedication of the church.

558. Chevet, Pontigny. From Chaillou des Barres.

A few years later was commenced the once celebrated abbey of Pontigny, near Auxerre, probably in 1150, and completed, as we now find it, within 15 or 20 years from that date.

Externally it displays an almost barn-like simplicity, having no towers or pinnacles—plain undivided windows, and no ornament of any sort. The same simplicity reigns in the interior, but the varied form, and play of light and shade, here relieve it to a sufficient extent, and make it altogether, if not one of the most charming examples of its age, at least one of the most instructive, as showing how much effect can be obtained with the

smallest possible amount of ornament. In obedience to the rules of the Cistercian order, it neither had towers nor painted glass, which last circumstance perhaps adds to its beauty, as we now see it, for the windows being small, admit just light enough for effect, without the painful glare that now streams through the large mullioned windows of the cathedral of Auxerre.

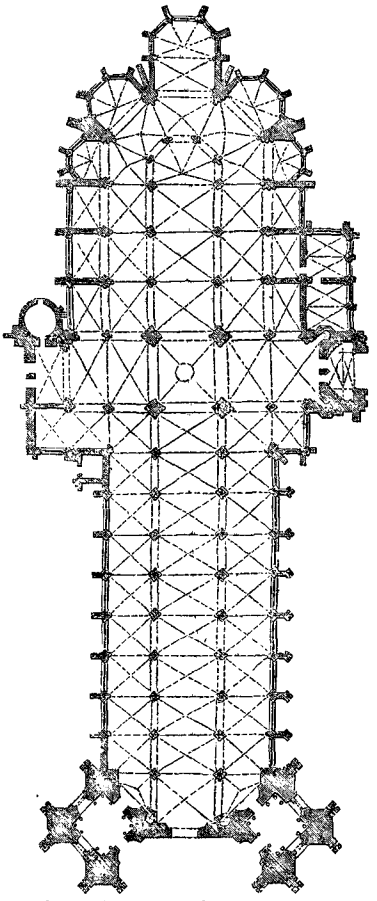
To the Englishman, Pontigny should be more than usually interesting, as it was here that the three most celebrated archbishops of Canterbury, Becket, Langton, and Edmund, found an asylum when driven by the troubles of their native land to seek a refuge abroad, and the bones of the last-named sainted prelate are said still to remain in the *châsse*, represented in the woodcut, now and for centuries the great object of worship here.

About a century after the erection of these two early specimens, we have two others whose dates are ascertained, which exhibit the pointed style in its greatest degree of perfection. The first, the Sainte Chapelle in Paris, was commenced in 1241, and dedicated in 1244; the other, the church of St. Urban at Troyes, was begun in 1262, and the choir and transept completed in 1266. Both are only fragments — choirs to which it was originally intended to add naves of considerable extent. The proportions of the Sainte Chapelle are in consequence somewhat too tall and short; but the noble simplicity of its design, and the majesty of its tall windows, which still retain a great portion of their painted glass, and the beauty of all its details, render it one of the most perfect examples of the style at its culminating point in the reign of St. Louis.

559. West Front of St. Marie de l'Epine. From Dusomerard.

The other was founded by Pope Urban IV., a native of Troyes, and would have been completed as a large and magnificent church, but for the opposition of some contumacious nuns, who had sufficient power and influence even in those days to thwart the designs of the Pope himself. Its great perfection is the beauty of its details, in which it is unsurpassed by anything in France or in Germany; its worst defect a certain exaggerated temerity of construction, which shows how fast, even then, architecture was passing from the hands of the true artist into those of the mason, whose attempts to astonish by wonders of construction then, and ever afterwards, completely marred the progress of the art which was thought to be thereby promoted.

About seventy years after this we come to the choir of St. Ouen, and to another beautiful little church, St. Marie de l'Epine, near Châlons sur Marne, commenced apparently about 1329, though not completed till long afterwards. It is small—a miniature cathedral in fact—like our St. Mary Redcliffe, which in many respects it resembles, but is a perfect bijou of its class. One western spire remains, the other was destroyed to make room for a telegraph. It is not only beautiful in itself, but interesting as almost the only example of an open-work spire in France.



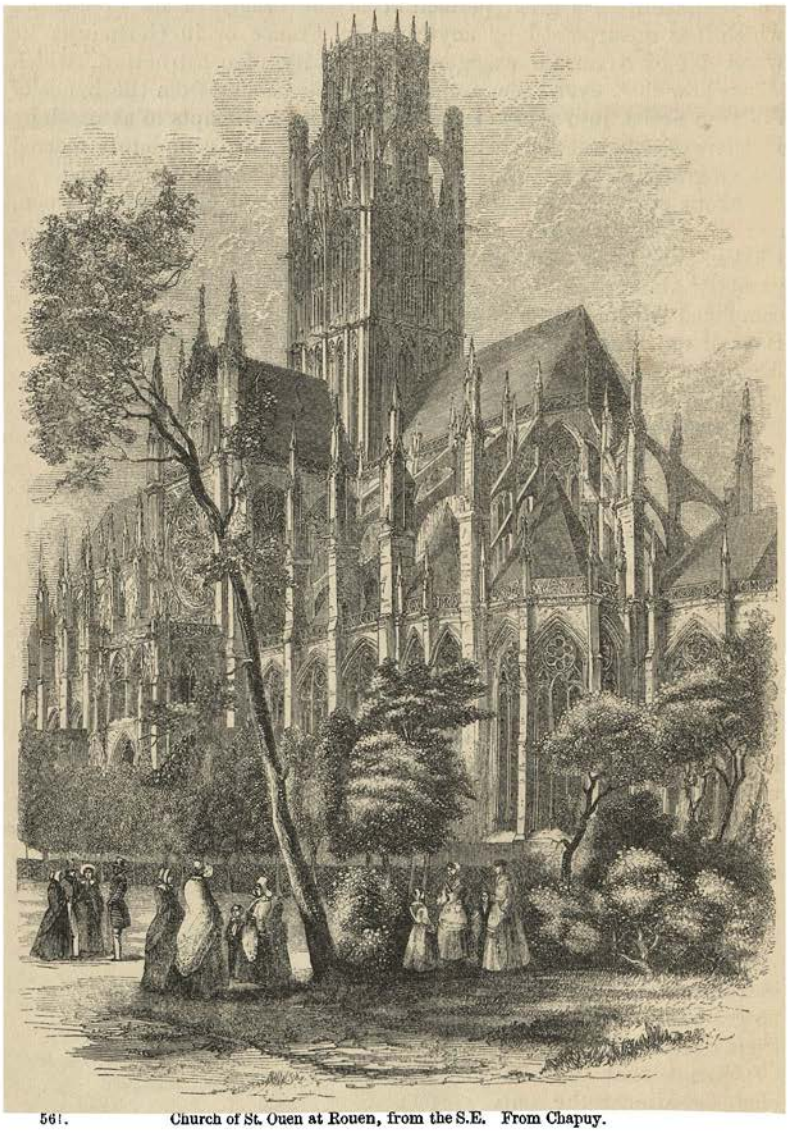
560. Plan of Church of St. Ouen at Rouen. From Peyrée's Manuel. Scale 100 ft. to 1 in.

The church of St. Ouen, at Rouen, was beyond comparison the most beautiful and perfect of the abbey edifices of France. This was commenced by Marc d'Argent in the year 1318, and carried on uninterruptedly for 21 years. At his death the choir and transepts were completed, or very nearly so. The English wars interrupted at this time the progress of this, as of many other buildings, and the works of the nave were not seemingly resumed till about 1490, and 25 years later the beautiful western front was commenced.

Except that of Limoges, the choir is almost the only perfect building of its age, and being nearly contemporary with the choir at Cologne (1276 to 1321), affords a means of comparison between the two styles of Germany and France at that age, and entirely to the advantage of the French example, which,

though very much smaller, avoids all the more glaring faults of the other.

Nothing indeed can exceed the beauty of proportion of this most elegant church; and except that it wants the depth and earnestness of



561. Church of St. Ouen at Rouen, from the S.E. From Chapuy.

the earlier examples, it may be considered as the most beautiful thing of its kind in Europe. The proportion too of the nave, transepts, and choir to one another is remarkably happy, and a most striking contrast to the very imperfect proportions of Cologne. Its three towers also

would have formed a perfect group as originally designed, but the central one was not completed till so late, that its details have lost the aspiring character of the building on which it stands, and the western spires, as rebuilt within the last ten years, are incongruous and inappropriate; whereas had the original design been carried out according to the drawings which still exist, it would have been one of the most beautiful façades known anywhere. The diagonal position of the towers met most happily the difficulty of giving breadth to the façade without placing them beyond the line of the aisles, as is done in the cathedral of Rouen, and at the same time gave a variety to the perspective which must have had the most pleasing effect. Had the idea occurred earlier, few western towers would have been placed otherwise; but the invention came too late, and in modern times the very traces of the arrangement have been obliterated.

The style of the choir of this church may be fairly judged from the view of the southern porch (woodcut No. 562). This has all that perfection of detail which we are accustomed to admire in Cologne Cathedral, and the works of the time of our second Edward, combined with a degree of lightness and grace peculiar to this church. The woodcut is too small to show the details of the sculpture in the tympanum above the doors, but that too is of exquisite beauty, and being placed where it can be so well seen, and at the same time so perfectly protected, it heightens the architectural design without in any way seeming to interfere with it. This is a somewhat rare merit in French portals. In most of these it is evident that the architect has been controlled in his design in order to make room for the immense quantity of sculpture which usually crowds them. On the other hand, the position of the figures is often forced and constrained, and the basreliefs nearly unintelligible, from the architect having been unable

562. Southern Porch of St. Ouen's at Rouen. From Chapuy.

to give the sculptor that free space which was requisite for the full development of his ideas.

It would be easy to select numerous examples from the collegiate and parish churches of France to extend this series. Our limits will not, however, admit of the mention of more than one other instance. The sepulchral church of Brou en Bresse was erected from 1511 to 1536, by Margaret of Austria, daughter of Maximilian, and aunt of Charles V., emperor of Germany. It was therefore nearly contemporary with Henry VII.'s Chapel at Westminster, and thus affords the means of comparison between the English and French styles of the day, which is wholly in favour of our own: both are the most florid specimens of their class in either country, but at Brou, both externally and internally, all majesty of form and constructive propriety are lost sight of; and though we wonder that stone could be cut into such a marvellous variety of lace-like forms, and are dazzled by the splendour of the whole, it is with infinite pleasure that we turn from these elaborate specimens of declining taste to an earlier and purer style. Fascinating as some of these late buildings undoubtedly are from the richness of decorative fancy that reigns in every detail, still they can only be regarded as efforts of the arts of the carver and stonemason, and not of the architect or sculptor properly so called.

In the city of Rouen we also find the beautiful church of St. Maclou (1432–1500), a gorgeous specimen of the later French style, presenting internally all the attenuation and defects of its age; but in the five arcades of its beautiful western front it displays one of the richest and most elegant specimens of Flamboyant work in France. It also shows what the façade of St. Ouen would have been if completed as designed. This church once possessed a noble central tower and spire, destroyed in 1794. When all this was complete, few churches of its age could have competed with it.

St. Jacques at Dieppe is another church of the same age, and possessing the same lace-like beauty of detail and elaborate finish, which charms in spite of soberer reason, that tells us it is not in stone that such vagaries should be attempted. Abbeville, St. Riquier, and all the principal towns throughout that part of France are rich in specimens of the late Gothic, of which we are now speaking. These specimens are beautiful in many respects, but in almost all inferior to those of the glorious epoch which preceded.

CHAPTER X.

CONTENTS.

Gothic details — Pillars — Windows — Circular windows — Bays — Vaults — Buttresses — Pinnacles — Spires — Decoration — Construction — Furniture of churches — Domestic architecture.

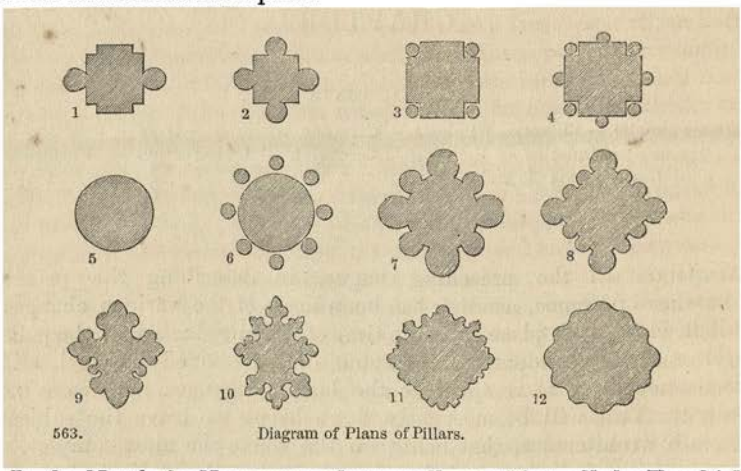
ALTHOUGH in the preceding pages, in describing the principal churches of France, mention has been made of the various changes of detail which took place from the time of the introduction of the pointed style till its abandonment in favour of the revived classical, still it seems necessary to recapitulate the leading changes that were introduced. This will be most fitly done before we leave the subject of French architecture, that being on the whole the most complete and harmonious of all the pointed styles, as well as the earliest.

PILLARS.

Of these details, the first that arrests the attention of the inquirer is the form of the pillars or piers used in the middle ages, inasmuch as it is the feature that bears the most immediate resemblance to the typical forms of preceding styles. Indeed, the earlier pillars in the round arched style were virtually rude imitations of Roman originals, made so thick and heavy as to bear without apparent stress the whole weight of the arches they supported, and of the superincumbent wall. This increase of the weight laid upon the pillars, and consequently in their strength and heaviness, was the great change introduced into the art of building in the early round Gothic style. With the same requirements the classic architects either must have thickened their pillars immensely, or coupled them in some way. Indeed the Romans, in such buildings as the Colosseum, placed the pillars in front and a pier behind, which last was the virtual support of the wall. The Gothic architects improved on this by adding a pillar, or rather a half pillar, on each side, to receive the pier arches, and carrying up those behind and in front to support the springing of the vault or roof, instead of the useless entablature of the Romans.

By this means the pier became in plan what is represented in figs. 1 and 2 in the diagram (woodcut No. 563). Sometimes it was varied, as represented in fig. 3, where the angle-shafts were only used to lighten the heaviness of the central mass; in other examples both these modes are combined, as in fig. 4, which not only constructively, but artistically, is one of the most beautiful combinations which the square forms are capable of, combining great strength with great lightness of appearance, and variety of light and shade.

These four forms may be said to be typical in the South, where the style was derived so directly from the Roman square pier combined with an attached circular pillar.



563. Diagram of Plans of Pillars.

In the North the Normans, and generally speaking, all the Frankish tribes, used the round pillar in preference to the square pier, and consequently the variations were as shown in figs. 5, 6, 7, and 8; which, though forming beautiful combinations, wanted the accentuation produced by the contrast between the square and round forms.

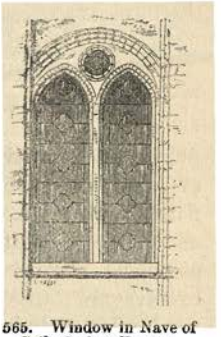
The architects after a time seem to have felt this, and tried to remedy it by introducing ogee forms and sharp edges, with deep undercut shadows, thus applying to the pillars those forms which had been invented for the mouldings of the ribs of the vaults, and for the tracery of the windows. The expedient was perfectly successful at first, and as long as it was practised in moderation, gave rise to some of the most beautiful forms of pillars to be found in any style. It proved, however, too tempting an opportunity for the indulgence of every sort of quirk and quibble; and after passing through the shapes shown in figs. 9 and 10, where the meaning of all the parts is still sufficiently manifest, it became as complicated as fig. 11, and sometimes even much more, so as to lose all meaning and all beauty, besides becoming very expensive and difficult to execute, so that in later times the architects reverted either to circular pillars, or to such a form as that shown in fig. 12, introduced in the 16th century. The change may have been partly introduced from motives of economy, and also to some extent from a desire to imitate the flutings of classical pillars: but from whatever motive it arose, it is singularly unmeaning and inartistic; and as the capital was at the same time omitted, the whole pillars took an appearance of cold poverty, entirely at variance with the true spirit of Gothic art. This last change showed, perhaps more clearly than those introduced into any other feature, how entirely the art had died away before the classical styles superseded it.

WINDOWS.

'Before the use of painted glass, very small apertures sufficed to introduce the required quantity of light into the churches. These retained their circular arched heads long after the pointed form pervaded the vaults and pier arches, because the architects still thought that the most beautiful, and it occupied so small a portion of the wall spaces that its lines neither came in contact nor interfered with the constructive lines of the building itself: as soon as it was required to enlarge them for the purpose of receiving large pictures, the circular form was no longer possible.

The woodcut No. 537, showing the side elevation of Notre Dame at Paris, illustrates well three stages of this process as practised in the 12th and 13th centuries. It exhibits first the large undivided window without mullions, the glass being supported by strong iron bars; next, that with one mullion and a circular rose in the head; and lastly, on the lower story, a completely traceried window. The transition from the old small window to the first of these is easily explained, and the woodcut No. 564, representing one of the windows in St. Martin at Paris, will explain the transition from the first to the second. Instead of one large undivided opening, it was often thought more expedient to introduce two lancets side by side; but as these never filled, or could fill, the space of one bay so as to follow its principal lines, it became usual to introduce a circular window of greater or less size between their heads. This, with the rude construction of the age, presented certain difficulties, which were obviated by carrying the masonry of the vault through the wall so as to form a discharging arch. When once this was done it required only a glance from an experienced builder to see that if the discharging arch were strong enough, the whole of the wall between the buttresses might be removed without endangering the safety of the building. This was accordingly soon done. The pier between the two lancets became attenuated into a mullion, the circle lost its independence, and was grouped with them under the discharging arch, which was carried down each side in boldly splayed jambs, and the whole became in fact a traceried window.

564. Window, St. Martin, Paris. From Paris Archéologique.

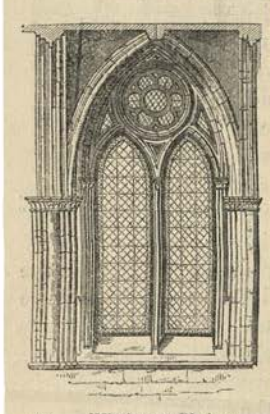


565. Window in Nave of Cathedral at Chartres.

In the cathedral at Chartres we have examples of the two extremes of these transitional windows. In the windows of the aisles of the nave (woodcut No. 565) the circle is small and insignificant, and only serves to join together the two lancets. In the clerestory (woodcut

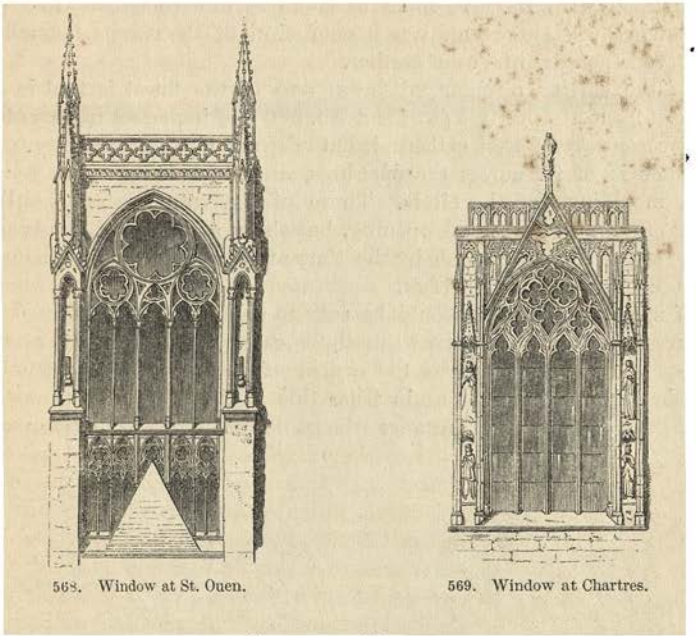
No. 566), which is somewhat later, the circle is all important and quite overpowers the lower part. Here it is in fact a circular window, supported by a rectilinear substructure. In both these instances the discharging arch still retains its circular form, and the tracery is still imperfect, inasmuch as all the openings are only holes of various forms cut into a flat surface, whereas to make it perfect, it is necessary that the lines of two contiguous openings should blend together, being separated by a straight or curved moulded mullion, and not merely pierced as they are in this instance. This may perhaps be better illustrated by one of the windows of the side aisles at Rheims, where the pointed Gothic window has become complete in all its essential parts. Even here, it will be observed how awkwardly the circle fits into the spherical triangle of the upper part of the window. Indeed, there is an insuperable awkwardness in the small triangles necessarily left in fitting circles into the spaces above the lancets, and beneath the pointed head of the openings. When four or five lights were used instead of two, this defect became more apparent; and even in the example from St. Ouen (woodcut No. 568), one of the most beautiful in France, the architect has not been able to obviate the discordance between the conflicting lines of the circle and spherical triangle. At last, after two centuries of earnest trial, the builders of these days found themselves constrained to abandon entirely these beautiful constructive geometric forms for tracery of a more manageable nature, and in place of the circle, they invented first a flowing tracery, of which the window at Chartres (woodcut No. 569) is an exquisite example; and then having shaken off the trammels of constructive form, launched at once into all the vagaries of the flamboyant style. In this style, stone tracery was made to look bent and twisted, as if it had been willow wands. Its forms, it must be confessed, were always graceful, but constructively weak, and frequently extravagant, showing a complete contrast with the contemporary perpendicular style in England. That failed from the stiffness of its forms; this from the fantastic pliancy with which so rigid a material as stone was used. Greatness or grandeur was as impossible in flamboyant tracery, as grace and beauty were with the perpendicular style; still for domestic edifices, and for the smaller churches erected in the 16th century, it must be confessed the flamboyant style has a charm it is impossible to resist. It is so graceful and so fantastically

566. Window in Choir of Cathedral at Chartres.



567. Window at Rheims.

brilliant, that it captivates in spite of our soberer reason, and lends an elegance to every edifice where it is found, only paralleled among the graceful fancies of the Saracenic architects of the best age.

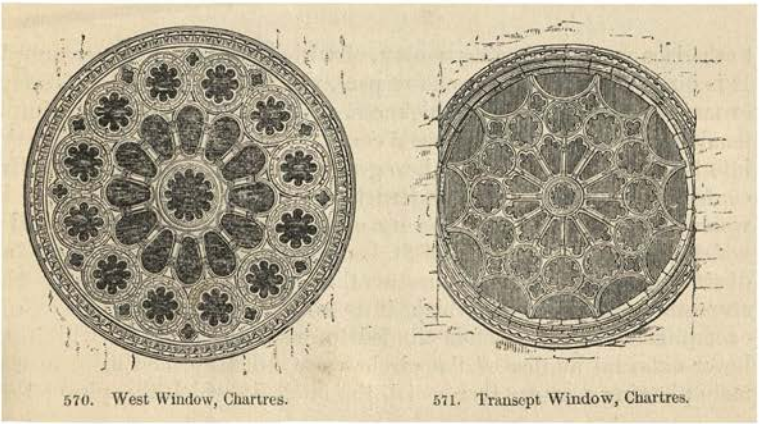


568. Window at St. Ouen.

569. Window at Chartres.

CIRCULAR WINDOWS.

By far the most brilliant examples of this class in France are to be found among the great circular windows with which the west ends and transepts of the cathedrals were adorned. There is, I believe, no instance in France of the great straight mullioned windows of which our architects were so fond. Even where the east end terminates squarely, as at Laon, it has a great rose window. There can be little



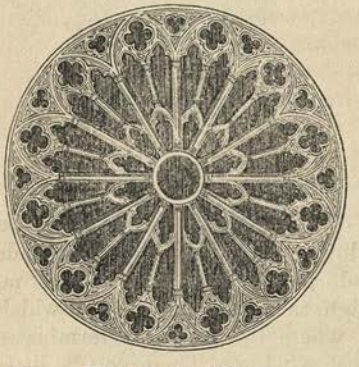
570. West Window, Chartres.

571. Transept Window, Chartres.

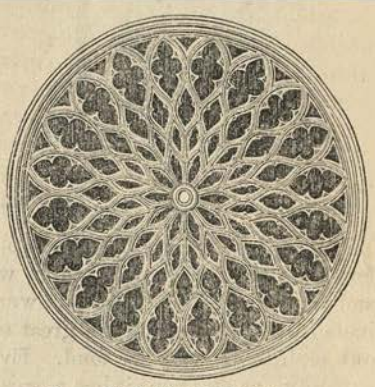
doubt that the circle, so long as it was wholly adhered to, was the noblest form architecturally, both externally and internally; but when the triforium below it was pierced, and the lower angles outside the circle filled with tracery, so as to make it into something like our great windows, the result was a confusion of the two modes, which preserved the advantages of neither.

Of the earlier circular windows, one of the finest is that in the western front at Chartres (woodcut No. 570), of imperfect tracery, like the greater part of that cathedral, but of great size and majesty. Its diameter is 39 ft. across the openings, and 44 ft. 6 in. across to the outer mouldings of the circle. Those of the transepts are smaller, being only 33 ft. across the opening, but show a considerable advance in the art of tracery, which by the time at which they were executed was becoming far more perfect.

If space admitted, it would be easy to select examples to trace the progress of the invention between these early efforts and the almost perfect window that adorns the centre of the west front at Rheims (woodcut No. 572); and again from this to that at Evreux (woodcut No. 573). In the latter instance, the geometric forms have given way



572. West Window, Rheims.

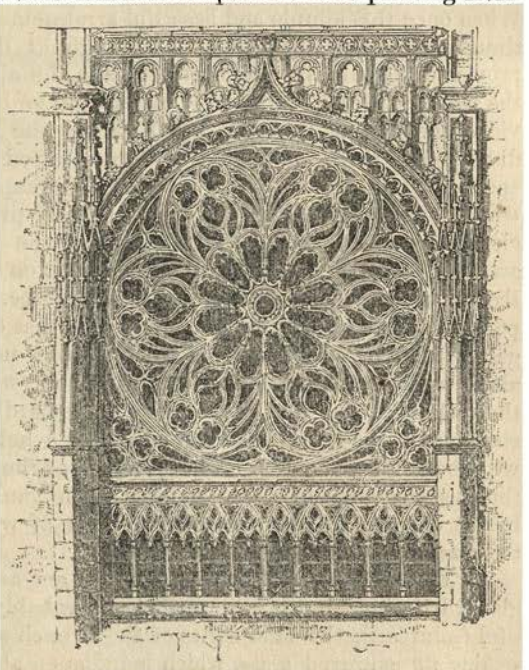


573. West Window, Evreux.

to the lace-work of flowing tracery, of which this is a pleasing example. It is further remarkable in one respect, that all the parts of the tracery or mullions are of the same thickness, whereas it is usual in flowing or flamboyant tracery to introduce a considerable degree of subordination into the parts, dividing them into greater or smaller ribs, thus avoiding confusion and giving it a constructive appearance which it otherwise would not possess. This is very apparent in such a window as that which adorns the west front of St. Ouen, at Rouen, where the parts are distinctly subordinated to one another, and have consequently that strength and character which it is so difficult to impart. It also exemplifies what was before alluded to, viz., the mode in which the lower external angles of the circle were filled up, and also, in a far more pleasing manner than usual, the mode in which the pierced tri-

forium is made to form part of the decoration. Owing to the strong transom bar here employed, there is strength enough to support the superstructure; but as too often is the case, when this is subdued and kept under, there is a confusion between the circular and upright parts, which is not pleasing. It is then neither a circular nor an upright window, but an indeterminate compound of two pleasing members, in which both suffer materially.

I believe it is safe to assert, that out of at least a hundred first class examples of these circular windows, which still exist in France, no two are alike. On the contrary, they present the most striking dissimilarity of design. There is no feature on which the French architects bestowed more pains, or in which they were more successful. They are, indeed, the *chefs-d'œuvre* of their decorative abilities, and the most pleasing individual features of their greater churches. At the same time, they completely refute the idea that the pointed form is at all necessary for the production of beauty in decorative apertures.



574. West Window, St. Ouen. From Pugin.

BAYS.

It may be useful here to recapitulate what has been said of the subdivision of churches into bays, or, as the French call them, *travées*. The two typical arrangements of these are shown in woodcuts Nos. 523 and 525, as existing before the introduction of the pointed forms. In the first a great gallery runs over the whole of the side aisle, introduced partly as a constructive expedient to serve the purpose for which flying buttresses were afterwards employed, partly as enabling the architect to obtain the required elevation without extraordinarily tall pillars or wide pier-spaces, both which were beyond the constructive powers of the earlier builders. These galleries were also useful as adding to the accommodation of the church, as persons were able thence to see the ceremonies performed below, and to hear the

mass and music as well as from the floor of the church. These advantages were counterbalanced by the greater dignity and architectural beauty of the second arrangement (woodcut No. 525), where the whole height was divided into that of the side aisles and of a clerestory, separated from one another by a triforium gallery, which represented in fact the depth of the wooden roof requisite to cover the side aisles. When once this simple and beautiful arrangement was adopted, it continued with very little variation throughout the middle ages.[1] The proportions generally used were to make the aisles half the height of the nave. In other words, the string-course below the triforium divided the height into two equal parts; the space above that was divided into three, of which two were allotted to the clerestory, and one to the triforium. It is true there is perhaps no single instance in which the proportions here given are exactly preserved, but they sufficiently represent the general division of the parts, from which the architects only deviated slightly, sometimes on one side, sometimes on the other, according to their taste or caprice. The only really important change afterwards introduced was that of glazing the triforium gallery also, by adopting a flat roof, or one nearly so, over the side aisles, as at the church of St. Ouen at Rouen (woodcut No. 568), where the roof is so flat that the edge of it is hardly seen by a spectator standing on the floor of the church. The whole walls of the church, with the slight exception of the spandrils of the great pier-arches, have thus become walls of glass, the mass of the vault being supported only by the deep and bold constructive lines of which the framework of the glass surface consists.

In England we have not, as far as I am aware, any instance of a glazed triforium, but it is nevertheless probably one of the most beautiful features in the later styles of the French architects, and where it retains its coloured glass, which is indispensable, produces one of the most fairy-like effects ever attained in any architectural work.

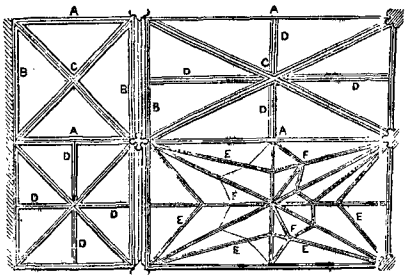
Vaults.

It has already appeared how essential a part of a Gothic church the vault was, and how completely it was the governing power that gave form to the art. We have also seen the various steps by which the architects arrived at the intersecting vault, which became the typical form in the best age. In France especially the stone vault was retained throughout as a really essential feature, for in that country the art of constructing ornamental wooden roofs never prevailed.

In the best age the arrangement of the French vaults was extremely simple. The aisles were generally built in square compartments, the vaults of which were first circumscribed each by 4 equal

[1] The earlier form is found retained at Noyon, at Paris, as shown in woodcut No. 536, and in most of the churches of the 12th century; but in the first years of the 13th it gave place to the second, and was never afterwards revived.

arches (woodcut No. 575), of which A A were transverse ribs, or *arcs doubleaux* as the French called them, and were used, as we have seen, in the old tunnel-vaults. These arches, as springing from the main points of support, were the principal strengtheners of the vault. B was called the *formeret*, and was a rib built into the wall, of the same form as the transverse ribs, and so called because, being the first constructed, it gave the form to the vault. Lastly there were two more ribs springing from angle to angle, and intersecting one another at C. These were called *ogives*, from the Latin word *augere*, to strengthen,[1] which was the object of their employment—and every builder knows how essential to strength this is. In modern vaults—in cellars or dock-vaults for instance, if built of brick—it is usual to insert a course of stone on the edge of the intersection, for bricks used there would be liable to be crushed or fall out. But this is now done flush with the brickwork. The mediæval architects allowed this course to project, not only because such a form was stronger in itself, but because it gave the appearance as well as the reality of strength.



575. Diagram of Vaulting.

The roof of the nave was composed of precisely the same parts, only that, being twice as wide as each compartment was broad, the length of the transverse ribs and of the intersecting ogives was greater in proportion to the formerets than in the aisles. Another addition, and certainly an improvement, was the introduction of ridge-ribs (D D), marking the point of the vault. These could not of course be used with circular arches, where there was no central line for them to mark; and it probably was from this cause that the French seldom adopted them, having been accustomed to vaults not requiring them. Another reason was that all their earlier vaults were more or less domical, or in other words the point C was higher than the points A or B, though this is more apparent in hexapartite vaults, or where one compartment of the nave-vaults takes in two of the aisles, than in quadripartite, like those now under consideration. Still all French vaults have this peculiarity more or less, and consequently the longitudinal ridge-rib, where used, has an up and down broken appearance, which is extremely disagreeable, and in a great measure must have prevented its adoption. There is, however, at least one exception to this rule in France in the abbey church of Souvigny, represented in the woodcut

[1] The French antiquaries employ this word as if it signified a pointed arch, whence they designate the style itself as *ogival*. There is no doubt, however, that the word has nothing to do with the form of the arch or the ogee, but is the name of a rib common to the round-arched as well as to the pointed style.

No. 576, where this rib is used with so pleasing an effect that one is surprised it was not more frequently adopted.

576. Abbey Church, Souvigny. From l'Ancien Bourbonnais.

These are the only features usually employed by French architects: still we sometimes find tiercerons, or secondary ogives, used to strengthen as well as to ornament the plain faces of the vaults, one or two on each face, as at E E (in woodcut No. 575); and lastly small ribs or *liernes*, F F, from *lier*, to bind, were sometimes used to connect all these, forming star patterns at the centre, and other complicated but beautiful ornaments of the vault. These last, however, are rare and exceptional in French vaulting, though treated by the English architects with such success that we wonder that they were not more generally adopted in France. The most probable explanation appears to be that the French architects depended more on colour than on relief for the effect of their vaults, while in England colour was sparingly used, its place being supplied by constructive carving. Whatever may have been the comparative merits of the two methods when first used, the English vaults have a great advantage now, inasmuch as the carving remains, while the paintings of the others have perished, and we have no means of judging of their original effect.

One of the most beautiful features of French vaulting, almost entirely unknown in this country, is the great polygonal vault of the semi-dome of the chevet. As an architectural object few will be disinclined to admit that it is, with its walls of painted glass and its light constructive roof, a far more beautiful thing than the plain semi-dome of the basilican apse, even with its mosaics. Still, as the French used it, they never quite surmounted the difficulties of its construction; and in their excessive desire to do away with all solid wall, and to get the greatest possible surface for painted glass, they distorted these vaults often in a very unpleasing manner.

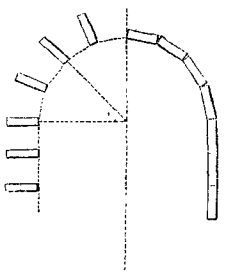
The chevet of Pontigny (woodcut No. 558) presents a good example

of the early form of the vault, and, owing to the small size of the windows and general sobriety of the composition, avoids the defects alluded to. Of the later examples there are few, except that of Souvigny, represented in woodcut No. 576, where the difficulty has been entirely conquered by constructing the spandrils with pierced tracery, so that the vault virtually springs from nearly the same height as the arch of the windows, and a very slight improvement would have made this not only constructively, but artistically perfect. This is a solitary specimen, and one which, though among the most beautiful suggestions of Gothic art, has found no admirers, or at least no imitators.

Notwithstanding this difficulty of construction, these pierced semi-domes are not only the best specimens of French vaulting, but among the most beautiful inventions of the middle ages, and form a finer termination to the cathedral vista than either the great windows of the English, or the wonderful rose-windows of the French cathedrals.

BUTTRESSES.

The employment of buttresses was a constructive expedient that followed almost indispensably on the use of vaults for the roofing of churches. It was necessary either to employ enormously thick walls to resist the thrust, or to support them by some more scientific arrangement of the materials. The theory of the buttress will be easily understood from the diagram (woodcut No. 577), representing 7 blocks or masses of masonry, disposed first so as to form a continuous wall, but which evidently affords very little resistance to a thrust or push, tending to overturn it from within. The left-hand arrangement is, from the additional breadth of base in the direction of the thrust, much less liable to fall outwards, provided the distance of the blocks from one another is not too great, and the mass of the vault does not press heavily on the intermediate space. This last difficulty was so much felt by the earlier French architects that, as we have seen, in the south of France especially, they used the roof of the side aisle as a continuous buttress to resist the thrust of their tunnel-vaults. It was surmounted also by the introduction of intersecting vaults, inasmuch as by this expedient all the thrusts were collected together at a point over each pier, and a resisting mass applied on that one point was sufficient to give all the stability required. This and the desire of raising the lights as high as possible into the roof were the principal causes that brought this form of vaulting into general use; but it has not yet been shown that the continuous vault is not nevertheless the more beautiful of the two forms, artistically at least, if not constructively.



577. Diagram of Buttresses.

There was still one difficulty to be mastered, which was that the

principal vault to be abutted was that over the nave or central part of the church, and buttresses of the requisite depth would have filled up the side aisles entirely. The difficulty occurred as early as in the building of the basilica of Maxentius (woodcut No. 259), and was there got over practically in something like the same manner as in the middle ages, except that the arch was there carried inside, whereas the Gothic architects threw the abutting arch across on the outside and above the roof.

Several of the previous woodcuts [1] show the system of flying buttresses in various stages of advancement. The view of one of those of the choir of St. Ouen (No. 578) exhibits the system in its greatest degree of development. Here there are two vertical and two flying buttresses, forming a system of great lightness, but at the same time of immense constructive strength, and when used sparingly and with elegance, as in this instance, constituting an object of great beauty. The abuse of this expedient, as in the cathedral at Cologne and elsewhere, went very far to mar the proper effect.

578. Flying Buttress of St. Ouen. From Batissier, Histoire de l'Art.

The cathedral at Chartres presents a singular but very beautiful instance of an earlier form of flying buttress; there the immense span of the central vault put the architects on their mettle to provide a sufficient abutment, and they did it by building what was literally an open wall across the aisle (see woodcut No. 543), strongly arched, and the arches connected by short strong pillars radiating with the voussoirs of the arch. Nothing could well be stronger and more scientific than this, but the absence of perpendicularity in the pillars was unpleasing to the eye then as now, and the contrivance was never repeated.

A far more pleasing form was that adopted afterwards at Amiens (woodcut No. 579) and elsewhere, where a series of small traceried arches stand on the lower flying buttress, and support the upper, which is straight-lined. Even here, however, the difficulty is not quite got over; the unequal height of these connecting arches, and the awkward angle which the lower supports make with the curvilinear form on which they rest, deprive them of that constructive propriety which alone secures a perfectly satisfactory result in architecture. The problem indeed is one which the French never thoroughly solved, though they bestowed immense pains upon it. Brilliant as the effect sometimes is of the

[1] See woodcuts Nos. 536, 543, 556, &c.

immense mass of pinnacles and flying buttresses, they are seldom so put together as to leave an entirely satisfactory result on the mind of the spectator. Taken all in all perhaps the most pleasing example is that of Rheims (woodcut No. 544), those on each side of the nave especially, where two bold simple arches transmit the pressure from an exquisitely bold pinnacled buttress to the sides of the clerestory, and in such a manner as to leave no doubt whatever either as to their purpose or their sufficiency to accomplish their object.

579. Flying Buttress at Amiens. From Chapuy.

Notwithstanding the beauty which the French attained in their flying buttresses, it is still a question whether they did not carry this feature too far. It must be confessed that there is a tendency in the abuse of the system to confuse the outlines and to injure the true architectural effect of the exterior. Internally it no doubt enabled them to lighten their piers and increase the size of their windows to an unlimited extent, and to judge fairly we must balance between the gain to the interior, and the external disadvantages. This we shall be better able to do when considering the next constructive expedient, which was that of the introduction of pinnacles.

PINNACLES.

The use of pinnacles, considered independently of their ornamental purposes, is evident enough. It is obvious that a wall or pillar which has to resist the thrust of a vault or any other power exerted laterally, depends for its stability solely on its thickness, solidity, and generally on its lateral strength. A material consideration, as affecting this solidity, is that of weight. The most frequent use of pinnacles by the French was to surmount the piers from which the flying buttresses sprang. To these piers weight and solidity were thus imparted, rendering them a sufficiently steady abutment to the flying arches, which in their turn abutted the central vaults.

It must be understood that these expedients of buttresses and pinnacles were only employed to support the central roof of the nave. Those of the aisles were so narrow as not to require any elaborate system of abutments for their support, the ordinary thickness of the walls sufficing for that purpose.

As a general rule the English architects never hesitated to weight

their walls so as to apply the resistance directly on the point required, and not only adorned the roofs of their churches with pinnacles, but raised towers and lanterns on the intersections on all occasions. The French, on the other hand, always preferred placing these objects, not *on* their churches, but rather grouped around them, and springing from the ground. This, it is true, enabled them to indulge in height and lightness internally to an extent unknown in England. This extravagance proved prejudicial to the true effect even of the interior, while externally the system was very destructive of grace and harmony. As high as the parapet of the side aisles a French cathedral is generally solid and simple, but above this base the forest of pinnacles and buttresses that spring from it entirely obscure the clerestory, and confuse its lines. Above this the great mass and simple form of the high steep roof, unbroken by pinnacles or other ornaments, contrasts ill with the lightness and confused lines immediately below it. This inconsistency tends to mar the beauty of French cathedrals, and even of their churches, though *there* the effect is less glaring owing to the smallness of the parts.

Spires.

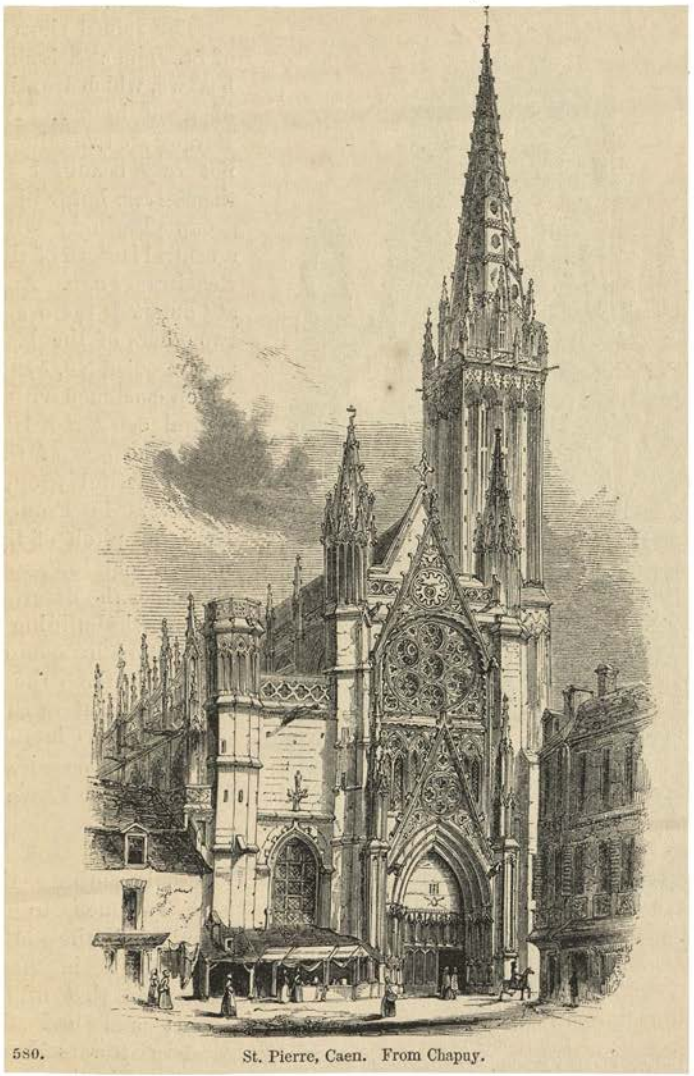
An easy transition leads us from pinnacles to spires, the latter being but the perfect development of the former, and each requiring the assistance of the other in producing a thoroughly harmonious effect. Still their uses were widely different, for the spire never was a constructive expedient, or useful in any way. Indeed, of all architectural features, it is the one perhaps to which it is least easy to apply any utilitarian rule.

We have seen that towers were originally introduced in Christian edifices partly as bell-towers, partly as symbols of power, sometimes perhaps as fortifications, besides the general purpose of ornamenting the edifices to which they were attached, and giving them that dignity which elevation always conveys.

From the tower the spire arose first as a wooden roof, and as height was one of the great objects to be attained by building the tower, it was natural to eke this out by giving the roof an exaggerated elevation beyond what was required as a mere protection from the weather. When once the idea was conceived of rendering it an ornamental feature, the architects were not long in carrying it out. The first and most obvious step was that of cutting off the angles, making it an octagon, and carrying up the angles of the tower by pinnacles, to soften the transition between the perpendicular and sloping part, and reduce it again to harmony.

One of the earliest examples in which this transition is successfully accomplished is in the old spire at Chartres (woodcut No. 542), where the change from the square to the octagon, and from the tower to the pyramid, are managed with great felicity. The western spires of St. Stephen's abbey at Caen (woodcut No. 522), though added in the age of pointed Gothic to towers of an earlier age, are also pleasing speci-

mens. But perhaps one of the very best in France, for its size and age, is that of St. Pierre at Caen (woodcut No. 580), uniting in itself

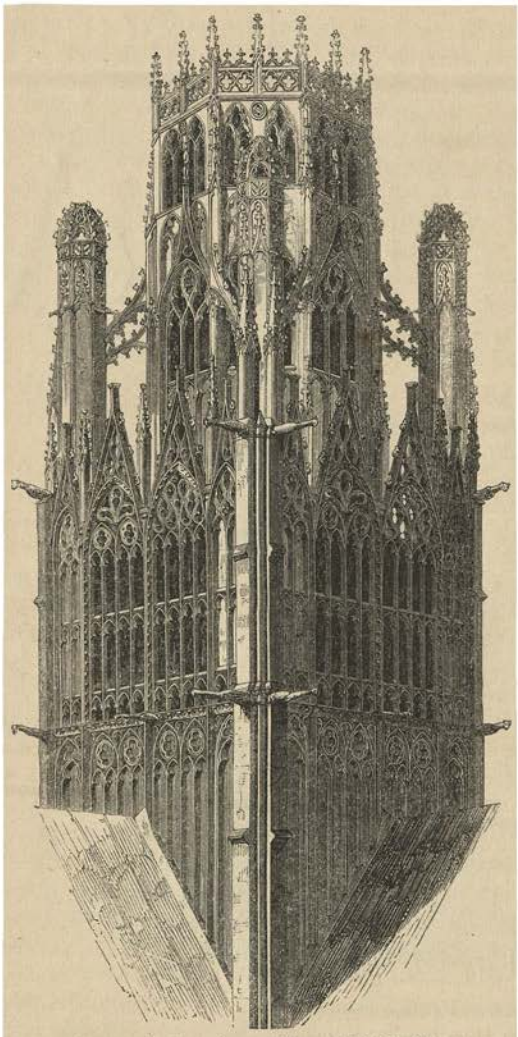


580. St. Pierre, Caen. From Chapuy.

all the properties of a good design without either poverty or extravagance. The little lantern of St. Marie de l'Epine (woodcut No. 559) is for its size as graceful an object as can well be designed; and the new spire at Chartres (woodcut No. 542), as before remarked, is, excepting the defects inherent in its age, one of the most beautiful in Europe.

This feature is nevertheless, it must be confessed, rarer in France than might be expected. This is perhaps owing to many spires having been of wood, and to their having been allowed to decay and been

removed; and in other instances it is certain that the design of erecting them has been abandoned in consequence of the tower, when finished, having been found insufficient to bear their weight.



581. Lantern, St. Ouen, Rouen. From a Print by Chapuy.

The ruined church of St. John at Soissons has two, which are still of great beauty. At Bayeux are two others, not very beautiful in themselves, but which group pleasingly with a central lantern of the Renaissance age. And at Coutances there are two others of the best age (woodcut No. 549), which combined with a central octagonal lantern make one of the most beautiful groups of towers in France. Here the pitch of the roof is very low, and altogether the external design of the building is much more in accordance with the canons of art prevalent on this side of the Channel than with those which found favour in France.

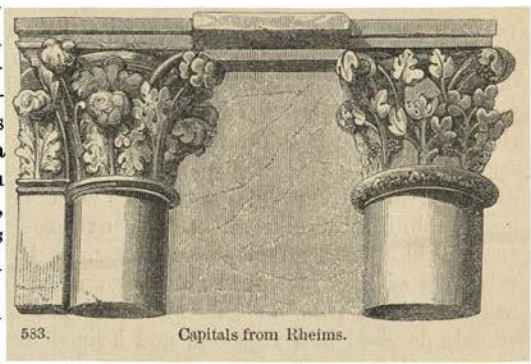
Of the earlier French lanterns, this at Coutances is perhaps the best specimen to be found: of the later class there is none finer than that of St. Ouen; and had the western towers been completed in the same character, in accordance with the original design, the towers of this church would probably be unrivalled. Even alone the lantern is a very noble architectural feature, and appropriate to its position, though some of the details mark the lateness of the age in which it was erected.

Notwithstanding the beauty of these examples, it must be confessed that the French architects were not so happy in their designs of spires and lanterns as they were in many other features.

It would be in vain to attempt to enumerate all the smaller decorative features that crowd every part of the Gothic churches of France, many of which indeed belong more to the department of the sculptor than to that of the architect, though the two are so intimately interwoven that it is impossible to draw the line between them. The corbel for instance represented in woodcut No. 582 is as much a niche for the statue as a bracket to support the ends of the ribs of the vaults, and is one of the thousand instances which are met with everywhere in Gothic art of that happy mixture of the arts of the mason, the carver, and the sculptor, which when successfully combined produce a true artistic effect. These combinations are so numerous and so varied that it would be hopeless to attempt to classify them, or even to attempt to illustrate the varieties found in any single cathedral.

582. Corbel. From Didron, Annales Archéologiques.

The same may be said of the capitals of the pillars, which in all the best buildings vary with every shaft, and seem to have been executed after the architect had finished his labours, by artists of a very high class. In the best age they seem, in France at least, as in the examples from Rheims, shown in woodcut No. 583, to have retained a reminiscence of the Roman Corinthian order, but to have used it with a freedom entirely their own.



583. Capitals from Rheims.

CONSTRUCTION.

It has been shown that the exigencies of a Gothic cathedral were a stone roof, a glass wall, and as great an amount of space on the floor, as little encumbered with pillars and points of support, as could be obtained. The two first of these points have been sufficiently insisted upon in the preceding pages; the last demands a few more remarks, as the success of the masons in the middle ages in this respect was one of their chief merits. This was but a mechanical merit after all, and one in which they hardly surpassed their masters the Romans. The basilica of Maxentius, for instance, covers a space of

68,000 square feet, or about the average size of a French cathedral, and the points of support, or in other words the piers and walls, occupy only 6900 ft., or between a 9th and a 10th part of the whole area. If we turn to the great cathedral of St. Peter's at Rome, we find the points of support occupying more than one-fourth of the whole area, though built on the model, and almost a copy, of the Roman basilica. At St. Mary's at Florence they occupy one-fifth; and in St. Paul's, London, and the Pantheon at Paris, the walls and pillars occupy, in the first rather more, in the other rather less, than one-sixth. If from these we turn to some of the mediæval examples, we find for instance at

	The whole area.	Solid.	Ratio.
Bourges	61,591	11,908	0·181, or between 1-5th and 1-6th.
Chartres	68,261	8888	0·130 ,, 1-8th.
Paris	64,108	7852	0·122 ,, 1-8th and 1-9th.
St. Ouen	47,107	4637	0·090 ,, 1-10th and 1-11th.

The figures, however, at Bourges include a heavy and extended porch not belonging to the original design, which if omitted would reduce the fractional proportion considerably; and if the unbuilt towers of St. Ouen were excluded, the proportion of the points of support to the area would be less than one-twelfth.

Our best English examples show a proportion of rather less than one-tenth, and though they have not the great height and wide-spreading vaults of the French cathedrals, their spires and pinnacles externally perhaps more than counterbalance this. Taken altogether it may generally be stated that one-tenth is about the proportion in the best churches of the best age. When it is carried beyond this, the lightness of the walls and pillars has been carried to excess, and even in St. Ouen, if there is an error, it is on this side. The church wants solidity, and apparent as well as real strength; for, without affecting the extreme massiveness of Egyptian art, with its wonderful expression of power and durability, there is an opposite extreme far more prejudicial to true architectural effect, in parading, as it were, mechanical contrivances of construction, so as to gain the utmost utilitarian effect with the least possible expenditure of means. This the Egyptians utterly despised and rejected, and heaped mass on mass, even at the expense of any convenience or use the building might be designed to possess. The French architects, on the other hand, made it their study to dispense with every ton of stone they possibly could lay aside. This system they undoubtedly carried too far, for, without looking at such extreme examples as St. Ouen, everywhere in France we find a degree of airy lightness and tenuity of parts destructive of many of the most important conditions of architectural excellence.

Furniture of Churches.

No less thought and expense were probably bestowed upon what we may call the furnishing of Gothic churches than upon the fabrics themselves. Though the objects included in this denomination were altogether of a lower class of art, they were still essential parts of the

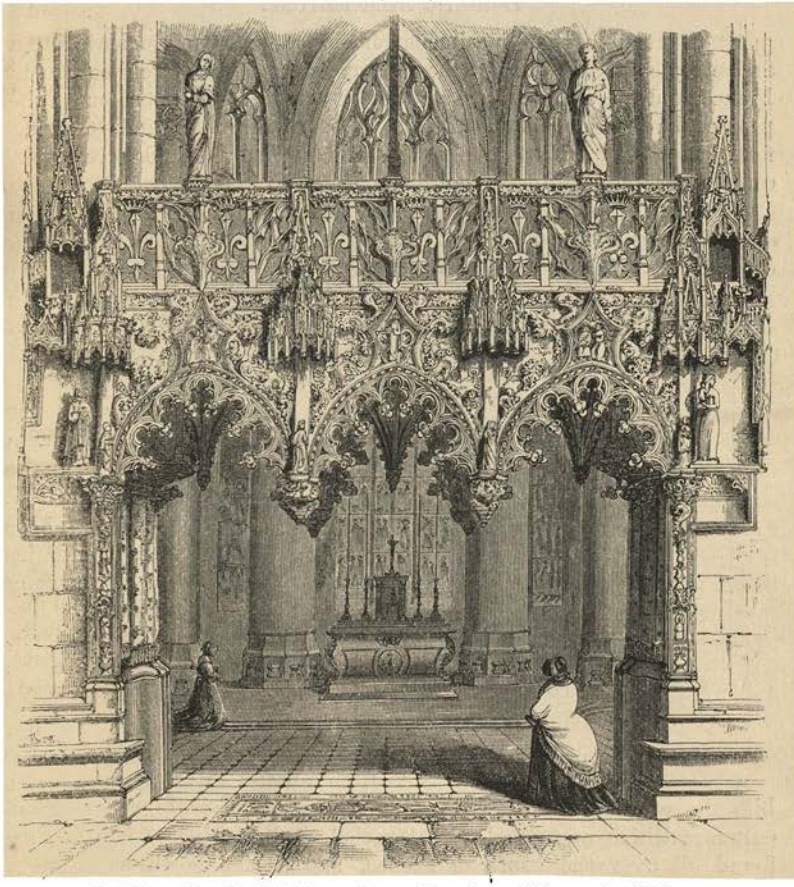
whole design, and we cannot fairly judge of the buildings themselves without at least endeavouring to supply their minor arrangements.

This is not easy in France, nor indeed in any part of Europe, as no one church or chapel displays at the present day all the wealth and ornament once belonging to it.

There is scarcely a single church in France with its original altar, the most sacred and therefore generally the most richly adorned part of the whole. These have either been plundered by the Huguenots, rebuilt in the execrable taste of the age of Louis XIV., or destroyed during the Revolution.

The cathedrals of Amiens and Rouen are among the few which retain their original stalls; and the inclosure of the choir at Chartres is one of the most elaborate pieces of ornamental sculpture to be found. That at Alby has been before alluded to, and fragments of this feature still exist in many cathedrals.

The Rood-screens, or *Jubés*, which almost all French churches once possessed, are rarer than even the other parts of these inclosures. A



584. Rood-Screen from the Madelaine at Troyes. From Arnaud, Voyage dans l'Aube.

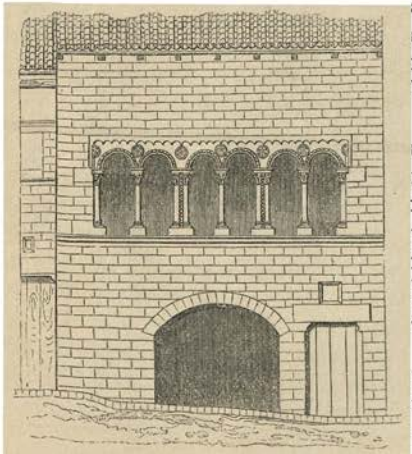
good example of them is found in the church of the Madelaine at Troyes (woodcut No. 584), which gives a favourable idea of the richness of decoration that was sometimes lavished on these parts. Though late in age, and aiming at the false mode of construction which was prevalent at the time of its execution, it displays so much elegance as to disarm criticism. It makes us too regret the loss of the rood-screens of St. Ouen's (of which we can judge from drawings), and of the greater cathedrals, of which we can form some idea by following out the design of the lateral screens, of which they formed a part.

If to these we add the altars of the minor chapels, with the screens that divided them from the nave, the tombs of wealthy prelates and nobles, the organ galleries, with their spiral stairs and richly carved instrument cases, and all the numberless treasures of art accumulated by wealth and piety, we may form some idea of what a Mediæval cathedral really was, but which scarcely now exists in any part of Europe.

Domestic Architecture.

It is probable that specimens remain sufficient to elucidate in an archæological point of view the progress of domestic architecture in France, and thereby to illustrate the early manners and customs of the people; but these remains are much less magnificent and less perfectly preserved than the churches and cathedrals, and have consequently received comparatively little attention.

Had any of the royal palaces been preserved to our day, or even any of the greater municipal buildings, the case might have been different. The former have however perished, without an exception; and as regards the latter, France seems always to have presented a remarkable contrast with the neighbouring country of Flanders.



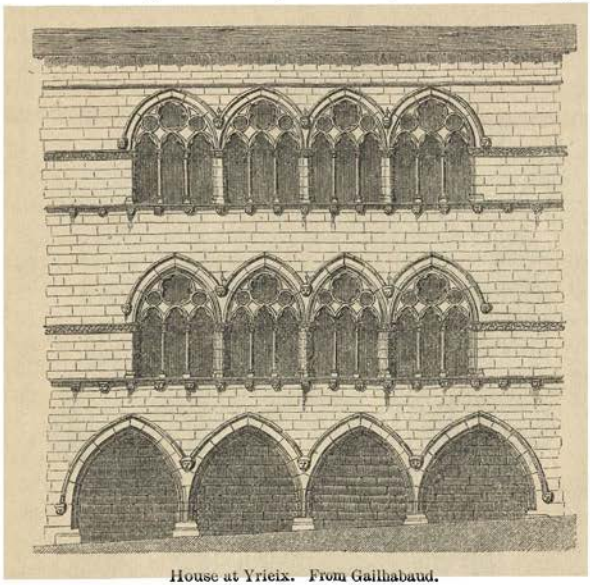
585. House at Cluny. From Gailhabaud.

No town in France proper seems to have possessed either a municipality of importance in the middle ages, nor consequently a town-hall of any note. Those found within its present boundaries belonged to Flanders or Germany at the time of their erection.

Three instances are here given, which will serve to illustrate the forms of the art at the three great epochs of the French Gothic style.

The first (woodcut No. 585) is from a house at Cluny, and exhibits the round-arched arcade with its alternate single and coupled columns, which was usual at that period, and of which examples are found all over the south of France, and as far north at least as Auxerre.

The second (woodcut No. 586) is from a house at Yrieix, and shows the pointed Gothic style in its period of greatest development; and



586. House at Yrieix. From Gailhabaud.

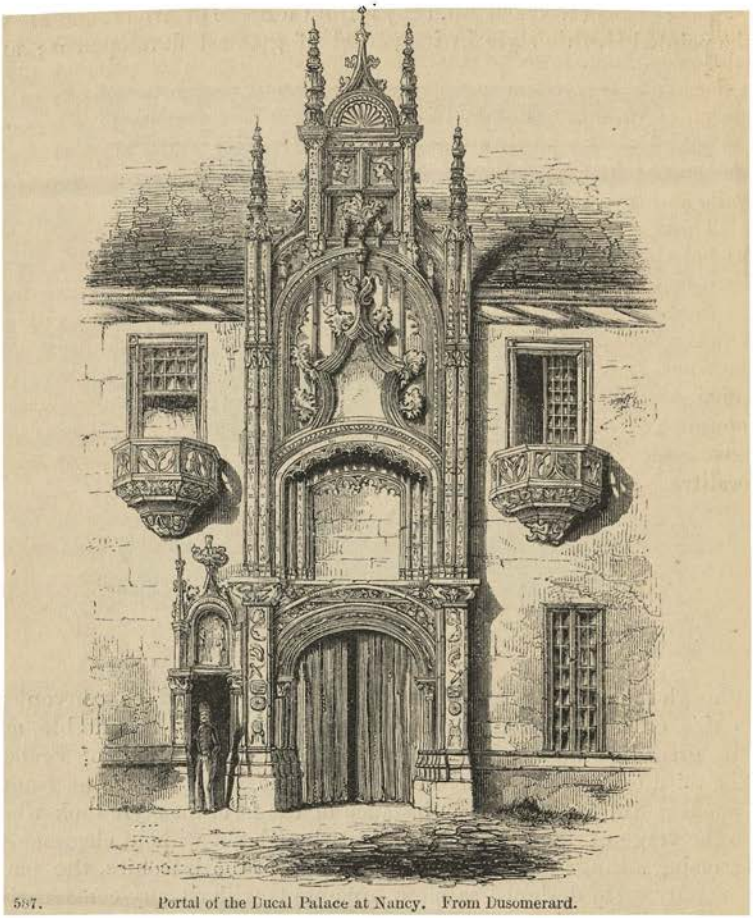
although the openings are of larger extent than would be convenient in this climate, still they are not more than would be suitable, and give great lightness and elegance to a façade in the south of France. The third example is from the portal of the Ducal Palace at Nancy (woodcut No. 587). It is an instance of the form the style took when on the verge of the Renaissance; and though not without elegance, is becoming strange and unmeaning, and except the balconies, the parts generally seem designed as mere ornaments without any constructive or utilitarian motive.

One of the most extensive as well as one of the best specimens of French domestic architecture is the house of Jacques Cœur, at Bourges, now used as the town-hall. It was built by the wealthy but ill-used banker of Charles VII., and every part of it shows evidence of careful design and elaborate execution; it was erected too at an age before the style had become entirely debased, and as a private residence in a town, and consequently without any attempt at fortification, it is the best that France now possesses.

The château of Meillan (Cher) is nearly a repetition of the same design, but at least a hundred years more modern.

Rouen possesses several examples of domestic architecture of a late date, so does Paris—among others, the celebrated Hôtel de Clugny; and few of the great towns are without fragments of some sort, but hardly any of sufficient importance to deserve separate notice or illustration.

France is not so rich as either Germany or England in specimens



587. Portal of the Ducal Palace at Nancy. From Dusomerard.

of castellated architecture. This does not apparently arise from no castles having been built during the middle ages, but rather from their having been pulled down to make way for more convenient dwellings after the accession of Francis I., and even before his time, when they had ceased to be of any use. Still the châteaux of Pierrefonds and Coucy are in their own class as fine as anything to be found elsewhere. The circular keep of the latter castle is perhaps unique, both from its form and dimensions; but being entirely gutted inside, its architectural features are gone, and it is difficult to understand how it was originally arranged, and by what means it was lighted and rendered habitable.

Tancarville still retains some features of its original fortifications, as also do the castles of Falaise and Gaillard.

The keeps of Vincennes and Loches are still remarkable for their height, though hardly retaining any features which can be called strictly architectural. In the South, the fortified towns of Carcassonne

and Aigues Mortes, and in the North Fougères, retain as much of their walls and defences as almost any places in Europe. The former in particular, both from its situation and the extent of its remains, gives a singularly favourable and impressive idea of the grave majesty of an ancient fortalice. But for alterations and desecrations of all sorts, the palace of the popes at Avignon would be one of the most remarkable castles in Europe: even now its extent and the massiveness of its walls and towers are most imposing.

These are either ruins or fragments; but the castle of Mont St. Michel, in Normandy, retains nearly all the features of a Mediæval fortress in sufficient perfection to admit of its being restored, in imagination at least. The outer walls still remain, encircling the village, which nestles under the protection of the castle. The church crowns the whole, and around it are grouped the halls of the knights, the kitchens and offices, and all the appurtenances of the establishment, intermingled with fortifications and defensive precautions that would have made the place nearly impregnable even without its sea-girt locality.

BOOK IV.

BELGIUM.

CHAPTER I.

CONTENTS.

Historical notice — Old churches — Cathedral of Tournay — Antwerp — St. Jacques at Liège.

The Gothic architecture of Belgium is in many points scarcely inferior to that of France. In a historical point of view the series of buildings is in some respects even more complete. In size, the cathedrals of this country are at least equal to those that have just been described. In general interest, no cathedral of France exceeds that of Tournay, none in gorgeousness that of Antwerp; and few surpass even those of Louvain, Mechlin, Mons, or those of Bruges and Ghent. Still it must be confessed that the churches of this country altogether are deficient in artistic design. Owing either to the art never having been in the hands of an organized and educated body like the clergy of France, or to some other local circumstances, they never display that elegance of proportion, and that beauty of well-considered and appropriate detail, which everywhere please and satisfy the mind in contemplating the cathedrals of France.

These remarks apply only to ecclesiastical art. In specimens of the civil and domestic architecture of the middle ages, Belgium surpasses all the rest of Europe put together. Her town-halls and markets, and the residences of her burghers, still display a degree of taste and elegance unsurpassed by anything of the age, and remain to this day the best index of the wealth and independence of the communities to which they belonged.

The early history of Belgium, dating from the withdrawal of the Romans, is involved in much obscurity. It appears to have been for the most part divided into various independent communities with no central authority or established capital. These communities at times acknowledged a very limited authority on the part of dukes or counts, and occasionally placed themselves under the protection of some powerful neighbouring monarch. But they never relinquished the right of self-government, nor fell under the power either of feudal chiefs or of a dominant hierarchy so completely as almost all the rest

of Europe. This independence was immensely developed by the great extension of trade at a very early period in the cities of Belgium. Commercial activity, together with the consequent increase of wealth and power of the cities, was necessarily accompanied by the rise of an important class of burghers till then unknown in Europe.

These historical circumstances go far to explain the peculiar character observable in the architectural remains of this country. We find here no trace of any combined national effort. Even the epoch of Charlemagne passed over this province without leaving any impress on the face of the country, nor are there any buildings that can be said to have been called into existence by his influence and power. The great churches of Belgium seem, on the contrary, to have been raised by the individual exertions of the separate cities on a scale commensurate to their several requirements. The same spontaneous impulse gave rise to the town-halls and domestic edifices, which present so peculiar and fascinating an aspect of picturesque irregularity.

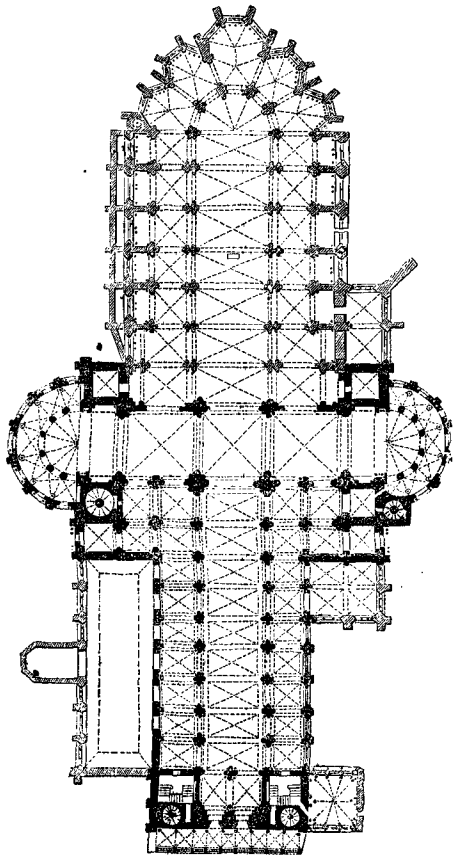
Even the devastation by the Normans in the 9th and 10th centuries seems to have passed more lightly over this country than any other in the North of Europe. They burned and destroyed indeed many of the more flourishing cities, but they did not occupy them, and when they were gone the inhabitants returned, rebuilt their habitations, and resumed their habits of patient self-supporting labour; and when these inroads ceased there was nothing to stop the onward career of the most industrious and commercial community then established in Europe.

588. View of West-end of Church at Nivelles. From a Sketch by the Author.

Of the oldest churches of Belgium, a large proportion are known to us only by tradition, having been pulled down to make way for the larger and more splendid buildings which were demanded by the continually increasing wealth and population of the cities. Of those which remain, one of the oldest and most interesting is that of St. Vincent at Soignies, built in 965 by Bruno, archbishop of Cologne, and though probably not quite finished within that century, it still retains the features of the 10th century more completely than almost any church in Europe. This church, that of St. Michele at Pavia, and the

Minster at Zurich, constitute a trio very similar to one another in design and in size, and differing principally in the degree of finish they display, this being by far the rudest in construction of the three. It possessed originally a western tower and a central lantern, the upper parts of both which are modernized. The east end was square, though possessing a shrine, the tomb of the saint whose name it bears. It may have been altered, and is built up on the outside so as to render examination impossible.

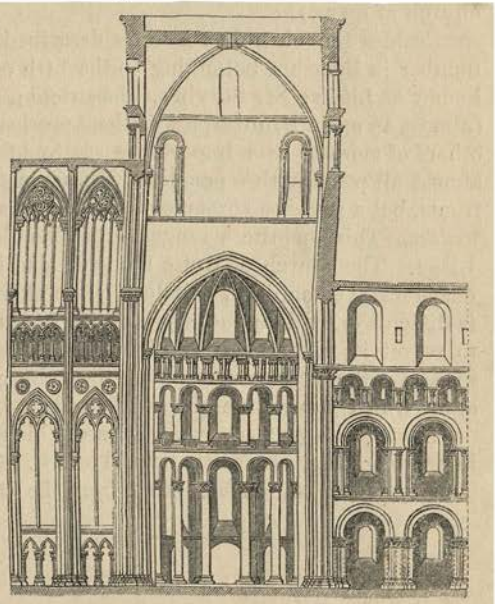
Another church, only slightly more modern, that of St. Gertrude at Nivelles (woodcut No. 588), presents the same peculiarity, of having a square termination towards the east, though it seems originally to have had an apse at the west end, where the façade was carried up to a considerable height, and adorned in the centre by a square tower, flanked by a circular one on each side. The latter retain their original form, though the central tower has been rebuilt in the 15th century. This church was built in the earliest years of the 11th century, and dedicated in 1045, the Emperor Henry IV. assisting at the ceremony. It is a first-class church with two transepts, and remains externally in all essential particulars as then built. The interior was entirely destroyed in the middle of the last century, which is a very great loss, although the new arrangement which has replaced it is in itself remarkably well designed.



589. Plan of Cathedral at Tournay. Scale 100 ft. to 1 in.

Passing over some minor examples, we come to the cathedral of Tournay, to the architect and artist the most interesting of the province. It is a first-class cathedral, more than 400 ft. in length, and covering with its dependencies an area of 62,525 ft. It consists of a nave, dedicated in 1066; of a transept, built about the year 1146; the choir, which formed part of this arrangement, was dedicated in 1213, but gave place about a century afterwards to that now standing, which

was dedicated in 1338, so that within itself it contains a complete history of the style; and though there is no doubt considerable incongruity in the three specimens here brought together, as they are the best of their respective classes in Belgium, the effect is not unpleasing, and their arrangement fortunate, inasmuch as, entering by the western door, you pass first through the massive architecture of the 11th to the bolder and more expanded features of the 12th century, a fitting vestibule to the exaggerated forms which prevailed during the 14th. In the woodcut (No. 590) the three styles are represented as they stand; but it would require far more elaborate illustration to do justice to the beauty of the deeply galleried nave, which surpasses any other specimen of Norman architecture, but which is here eclipsed by the two remaining apses of the transept. These, notwithstanding a certain rudeness of detail, are certainly the finest productions of their age, and as magnificent a piece of architecture as can be conceived. The choir is the least satisfactory part of the whole; for though displaying a certain beauty of proportion, and the most undoubted daring of construction, its effect is frail and weak in the extreme. Still, if the tracery were restored to the windows, and these filled with painted glass, great part of this defect might be removed. At the best, the chief merit of this choir is its clever and daring construction. Even in this the builder miscalculated his own strength, for it was found necessary to double the thickness of all the piers after they were first erected. This addition would have been an improvement if part of the original design, but seems now only to betray the weakness which it was meant to conceal.



590. Section of Central Portion of Church at Tournay, looking South. Scale 50 ft. to 1 in.

It is by no means clear that originally there were any entrances at the west front; at least there certainly was no central doorway; and probably the principal entrances were, as in most German churches, under lateral porches.

Externally, the west front had neither the flanking towers of the Norman church, nor the frontispiece usual in Germany, but terminated in a gable the height of the wooden roof of the nave. The original church was triapsal, and a large square tower adorned the intersection

of the nave and transept, which was originally surrounded by 6 tall square towers belonging to each of the apses. Four of these still exist, and with the remaining part of the central tower form as noble a group as is to be found in any church of this province. In its triapsal state, its superior dimensions and the greater height of its towers must have rendered it a more striking building than even the Apostles' Church at Cologne (woodcut No. 453), or indeed any other church of its age.

Besides the churches already described, there are a considerable number in Belgium belonging to the 11th century, such as St. Bartholomew at Liège; St. Servin's, Maestricht; the church at Ruremonde (almost an exact counterpart of the Apostles' Church at Cologne), and others of more or less importance scattered over the country. They almost all possess the peculiarity of having no entrance in their west fronts, but a massive screen or frontispiece surmounted by two or three towers. This was the arrangement of the old church of St. Jacques at Liège. The church of Notre Dame de Maestricht presents a somewhat exaggerated example of this description of front (woodcut No. 591). It is difficult to explain the origin of this feature, nor have we any reason to regret its abandonment. There can be no doubt that the proper place for the principal entrance to a church is the end opposite the altar, which this screen entirely barred.

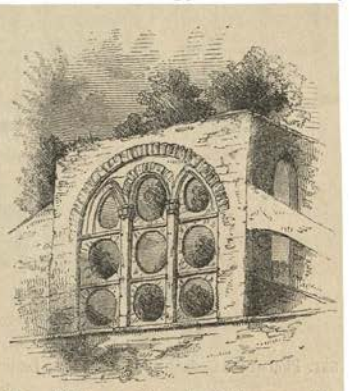
Among the smaller antiquities of this age, none are perhaps more interesting than the little chapel of St. Sang, at Bruges, built by Thierry of Alsace, on his return from the Holy Land, A.D. 1150; it is

591. West Front of Notre Dame de Maestricht. From Schaye's Belgium.

592. Spires of the Chapel of St. Sang, Bruges. From a Sketch by the Author.

a small double chapel, very like those already described as so common in Germany (p. 584, and woodcuts Nos. 462 and 463), but less ornate than these generally were; at one angle of it are two spires, represented in woodcut No. 592. The more slender of these would not excite remark if found in Cairo or Aleppo, so exactly does it take the Eastern form; the other, on the contrary, seems to belong to the 16th or 17th century: it is only one, however, of the numerous instances that go to prove how completely art returned, at the period called the Renaissance, to the point from which it started some four or five centuries earlier. It returned with something more of purity of detail and better construction, but unfortunately without that propriety of design and grandeur of conception which mark even the rude buildings of the first *naissance* of Gothic art.

Belgium is rich in small specimens of transitional architecture, and few of her more extensive ecclesiastical establishments are without some features of this class, often of great beauty. Their age has not yet, however, been determined with anything like precision by the Belgian antiquaries; but on the whole, it seems that in this, as in most other respects, this country followed the German much more closely than the French type, hesitating long before it adopted the pointed arch, and clinging to circular forms long after it had familiarly employed the pointed arch, oscillating between the two in a manner very puzzling, and requiring more care in determining dates than any other part of Europe. Besides this, none of the Belgian buildings have yet been edited in such a manner as to afford materials for the establishment of any certain rule. Perhaps the most interesting specimen of the transitional period, and certainly one of the most beautiful ruins in the country, is the abbey church of Villers, near Genappe, a building 338 ft. in length by 67 in width, built with all the purity of what we would call the Early English style, but with a degree of experimental imperfection in the tracery of which I hardly know an example elsewhere. The representation here given of one of the windows of the transept will explain this, and throughout the tracery consists of holes cut into slabs in this manner; yet this church is said to have been commenced in 1225, and only finished in 1276. In Germany such a date would be probable; in France a similar specimen would be assigned to a period from 70 to 100 years earlier.



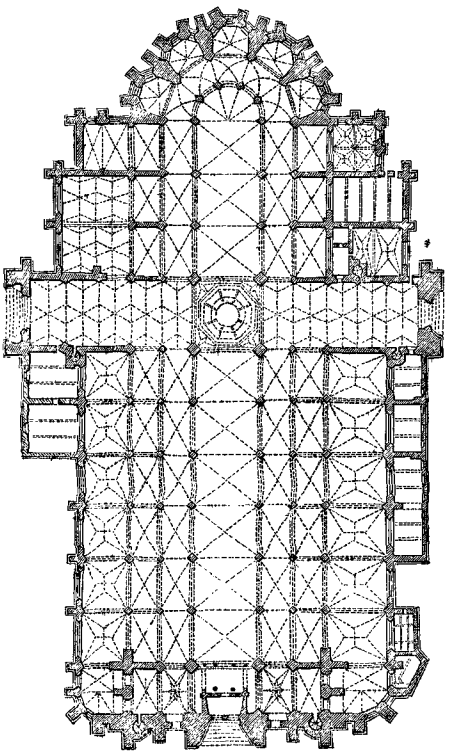
593. Window in Church at Villers, near Genappe. From a Sketch by the Author.

Among the many efforts made in Belgium to get rid of the awkwardness of the pointed form for windows, was that in the choir of Notre Dame de la Chapelle, at Brussels (1216?), where the circular tracery is inserted in a circular-headed window, producing a much more pleasing effect, both internally and externally, than the pointed

form, except with reference to the vault, with which it is so little in accordance that the experiment seems to have been abandoned, and no attempt made afterwards to renew it.

Besides those already mentioned, Belgium possesses about twenty first-class churches of pointed architecture, all deserving attentive consideration, and some of them almost unrivalled edifices of their class. Among the earliest of these is the cathedral of Liège, begun in 1189, exhibiting the style in great purity. It has no western entrance, but, like St. Croix, St. Jacques, and all the principal churches of this city, is entered by side porches.

A little later we have the eastern parts of St. Gudule, Brussels (A.D. 1220), and two other very beautiful churches: Notre Dame de Tongres (1240), and St. Martin, Ypres (1254). The latter is perhaps the purest and best specimen of the Gothic of the 13th century in Flanders; and of about the same age is the beautiful church of N. D. de Dinant. These are almost the only important specimens of the contemporary art which still excites our admiration in all the principal cities of France—though almost all the great cathedrals in that country belong to this age, so prolific of great buildings also in England.



594. Plan of the Cathedral at Antwerp. Scale 100 ft. to 1 in.

In the next century we have N. D. de Huy (1311), the beautiful parish church at Aerschot (1337), and N. D. de Hal (1341)—small but elegant churches. The two crowning examples, however, of this age are N. D. of Antwerp (1352–1411), and St. Rombaut, Malines, commenced about the same time. Though internally finished so early, the works of its great tower, like those at Antwerp, were continued till late in the next century.

Antwerp cathedral is one of the most remarkable churches in Europe, being 390 ft. long by 170 in width inside the nave, and covering rather more than 70,000 square feet. As will be seen by the plan, it is divided into 7 aisles, which gives a vast intricacy and picturesqueness to the perspective; but there is a want of harmony among

the parts, and of subordination and proportion, sadly destructive of true architectural effect; so that notwithstanding its size, it looks much smaller internally than many of the French cathedrals of far less dimensions. If there had been at least 10 bays in the nave instead of only 7, and the central aisle had been at least 10 ft. wider, which could easily have been spared from the outer, the apparent size of the church would be very much greater; but besides this, it wants height, and its details show a decadence which nothing can redeem.

Its magnificent portal, with its one finished tower 406 ft. in height, was commenced in 1422, but only finished in 1518, and more in accordance with the taste of the 16th century than of the original design. Although it is, in consequence, impossible to be satisfied either with the outline or the detail, it is still so gorgeous a specimen of art, and towers so nobly over the buildings of the city, as to extort our admiration and regret that the sister tower was not also completed to make up a façade which then might for certain effects challenge any that the middle ages have produced.

The church of St. Rombaut at Malines, though very much smaller than that at Antwerp, being only 300 ft. in length internally, and including the tower, only 385 ft. over all externally, is still a far more satisfactory church in every respect. Indeed, it is one of the finest of those which have round pillars in the nave instead of the clustered columns which give such beauty and such meaning to most of the churches of this age. It was originally designed to have one western spire, which, if completed, would have risen to the height of nearly 550 English feet. It was never carried higher than to the commencement of the spire, 320 ft., and at that height it now remains. Even as it is, it is one of the noblest erections of the middle ages, the immense depth of its buttresses and the boldness of its outline giving it a character seldom surpassed.

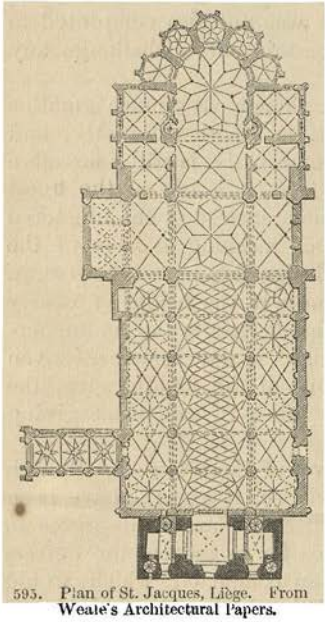
St. Pierre's, of Louvain, is a worthy rival of these two; for though perhaps a century more modern, or nearly so, it seems to have been built at once on a uniform and well-digested plan. This gives to the whole building a congruity which goes far to redeem the defects in its details. The façade has never been completed, which would have rendered it the noblest building of the three. It was designed on the true German principle of a great western screen, surmounted by three spires, the central one 535 ft. in height, the other two 430 ft. each.[1]

These are certainly the finest specimens of Belgian ecclesiastical art. Almost all the churches erected afterwards, though some of them very beautiful, are characterised by the elaborate weakness of their age. Among these may be mentioned St. Gommaire, at Lierre, commenced A.D. 1425, but not completed till nearly a century afterwards; and St. Jacques at Antwerp, a large and gorgeous church, possessing size and proportion worthy of the best age, but still unsatisfactory,

[1] A beautiful drawing of this façade to a very large scale still exists in the town-hall of the city, and a model in stone, from which the effect may be seen.

from the absence of anything like true art or design pervading it. The same remarks do not apply to St. Waudru at Mons, 1450–1528, one of the very best specimens of its age—pleasing in proportion and elegant in detail. Internally a charming effect of polychromy is produced by the cold blue colour of the stone, contrasted with the red brick filling in of the vault; this contrast being evidently a part of the original design. By some singular freak of destiny it has escaped whitewash, so that we have here one instance at least of a *true* mode of decoration, and to a certain extent a very good one. The exterior of this church is also extremely pleasing for its age. Its tower and spire are unfortunately among those that we know only from the original drawings, which are still preserved, and show a very beautiful design.

Of about the same age is St. Jacques at Liège (woodcut No. 595), a church of the second class in point of size, being only 254 ft. in length internally, by 92 ft. across the nave. At the west end it still retains the screen of the old church, marked in black on the plan. The principal entrance is a splendid porch of flamboyant design on the north. The east end may be said to be a compromise between the French and German methods. It is not a chevet, inasmuch as it has not the circumscribing aisle, while its circlet of chapels prevents its being considered as a German apse. Altogether its plan is characteristic of its locality, on the borders between France and Germany, mixing together most of the peculiarities of both countries. For its age too the details are generally good, but construction is no longer the ruling motive, and confusion is the result. The most remarkable thing about the church is, that it is one of the very few churches in Europe which retain their polychromatic decorations in anything like completeness, especially on the roof. The paintings here are late, bordering on the cinque-cento period; yet the effect produced, though gorgeous, is remarkably pleasing and beautiful, and ought at once and by itself to set at rest the question as to the expediency of painting the vaults of churches, or leaving them plain. My own conviction is, that all French vaults were once painted to as great an extent as this one is. Our English architects often, I believe, depended on form and carving, but on the Continent this could not be the case.



595. Plan of St. Jacques, Liège. From Weale's Architectural Papers. Scale 100 feet to 1 inch.

Of the remaining churches, St. Bavon's at Ghent, and St. Martin's at Liège, both commenced, as they now stand, in the middle of the 16th century, are among the most remarkable, and for their age wonderfully free from the vices of Renaissance. At the same age in France,

or even in England, they would have been Italianized to a far greater extent.

But there is scarcely a second-rate town or even a village in Belgium that does not possess a church of more or less importance of the Gothic age, or one at all events possessing some fragment or detail worthy of attentive study. This circumstance is easily explained, from the fact that during the whole of the Mediæval period, from the 10th to the 16th century, Belgium was rich and prosperous, and since that time till the present comparatively so poor as to have had no ambition to destroy, and no power to rebuild. Considering its extent, the country is indubitably richer in monuments than France, or perhaps any other country in Europe; but the architecture is certainly not so good or satisfactory.

CHAPTER II.

CONTENTS.

Civil Architecture — Belfries — Hall at Ypres — Louvain — Brussels — Domestic Architecture — Holland.

Civil Architecture.

The pre-eminence of Belgium consists in her civil, or rather her municipal edifices, which surpass those of any other country. None of these are very old, which is easily accounted for. The rise of commercial enterprise in Belgium, though early compared with other European nations, was far more recent than the age of military and ecclesiastical supremacy. In precisely the same degree castles and churches preceded the erection of town-halls.

In the 12th century, when the monarchy of France was consolidating itself, the cities of Belgium were gradually acquiring those rights and privileges which soon placed them among the wealthiest and most prosperous communities of Europe. One of the earliest architectural expressions of their newly-acquired independence was the erection of a belfry. The right of possessing a bell was one of the first privileges granted in all old charters, not only as a symbol of power, but as the instrument for calling the community together, either with arms in their hands to defend their walls, to repress internal tumults, for the election of magistrates, or deliberation on the affairs of the commonwealth. The tower too on which the bell was hung was a symbol of power in all ages, and, whether on the banks of the Scheldt or the Po, the first care of every enfranchised community was to erect a "tower of pride" proportionate to their greatness.

The tower too was generally the record-office of the city, the place where the charters and more important deeds were preserved secure from fire, and in a place sufficiently fortified to protect them in the event of civic disturbances.

All these uses have passed away, and most of the belfries have either fallen into neglect or been removed or appropriated to other purposes. Of those remaining, the oldest seems to be that of Tournay, a fine tower, though a good deal altered and its effect destroyed by more modern additions.

The belfry at Ghent was commenced in 1183, but the stone-work was only completed in 1337. In 1376 a wooden spire was placed upon it, making up the height to 237 ft. This has been recently taken down in order to complete the tower according to the original design,

which, like that of most of the unfinished buildings of Belgium, has been carefully preserved. When finished it will be about 300 ft. in height, and one of the finest belfries in the country. The woodcut No. 596 is a reduction of the original drawing, which, though not so perfect as some others, gives a fair idea of what is intended.

596. Belfry at Ghent. From the original drawing.

The belfry of Brussels was one of the finest in the country, but after various misfortunes it fell in 1714, and is only known now by a model still preserved in the city.

At Ypres and Bruges the belfries form part of the great halls of the city. Those of Lierre, Nieuport, Alost, Furnes, and other cities, have been all more or less destroyed by alterations, and are more interesting to the antiquary than to the architect, besides that, like the cities themselves, they never can have been of the first class, or remarkable for any extraordinary magnificence.

The great municipal halls, which are found in all the principal cities of Belgium, are of three classes:—1. Town-halls—the municipal senate-houses and courts of justice. 2. Trade-halls or market-houses. The principal of these were cloth-halls, that being the great staple manufacture of Belgium during the middle ages. And lastly guildhalls, or the separate places of assembly of the different guilds or associated trades of the cities.

As far as existing examples go, it would appear that the trade-halls were the first erected. The cloth-hall at Ypres is by far the most magnificent and beautiful of these, as also the earliest. The foundation-stone was laid in 1200 by Baldwin of Constantinople, but it was not finished till 104 years afterwards. The façade is 440 ft. in length, and of the simplest possible design, being perfectly straight and unbroken from end to end. The windows of each story, being all of one design, are repeated, not only along the whole front, but at each end. Its height is varied by the noble belfry which rises from its centre, and by a bold and beautiful pinnacle at each end. The whole is of the pure architecture of the 13th century, and is one of the most majestic edifices of its class to be seen anywhere. It might perhaps have been improved by the greater degree of expression and the bolder shadows which lines brought down to the ground would have given it, but as it is, it is extremely pleasing from its simplicity and the perfect adaptation of its exterior to its internal arrangements. These consisted of one vast hall on the ground-floor, supported by several ranges of columns, with long galleries and great halls above it for the use of the trade to which it belonged.

The town-hall at Bruges is perhaps the oldest building erected

especially for that purpose in Belgium, the foundation-stone having been laid in 1377. It is a small building, being only 88 ft. in front by 65 in depth, of a singularly pure and elegant design. Its small

597. Cloth-hall at Ypres.

size causes it to suffer considerably from its immediate proximity to the cloth-hall and other trade-halls of the city. These, grouped with the belfry in their centre, occupy one end of the great Place, and, though

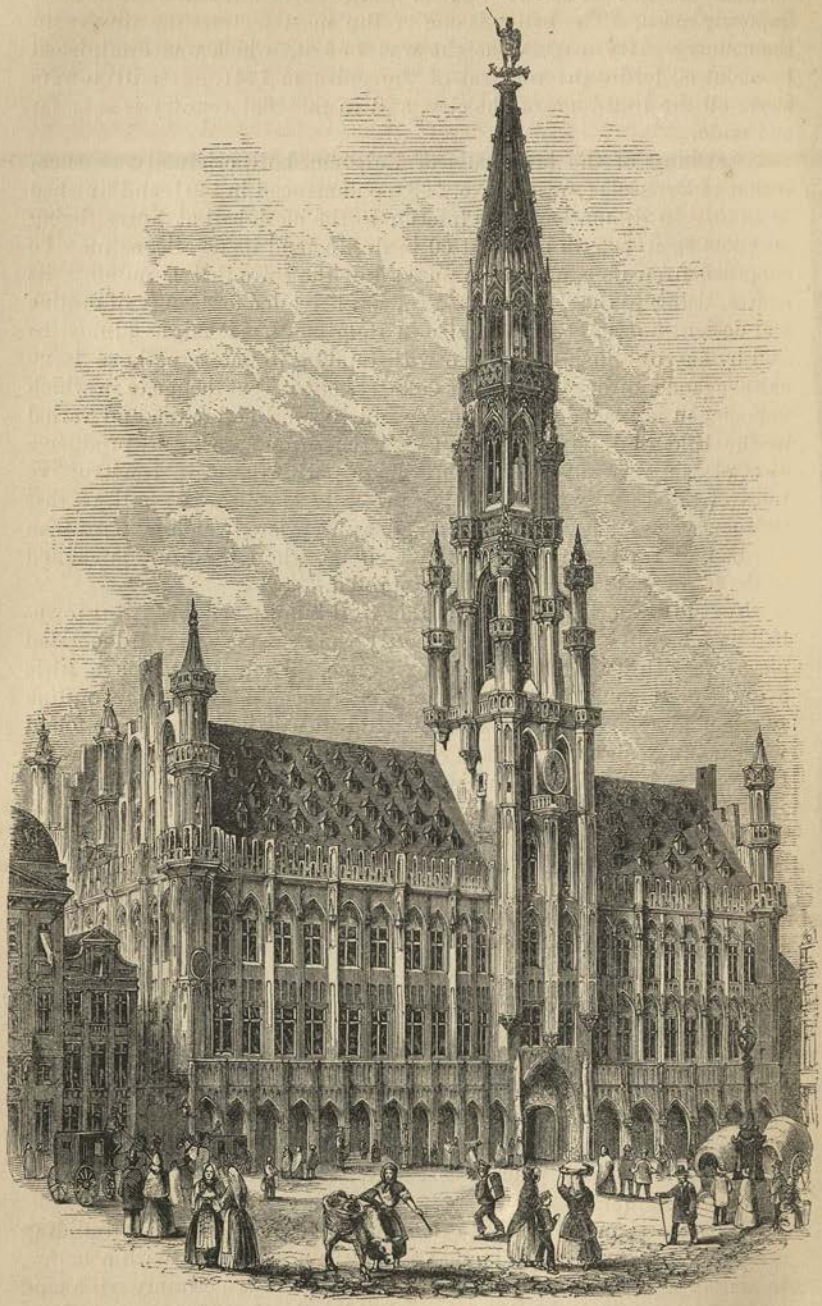
not remarkable for beauty, either of design or detail, still form a most imposing mass. The belfry is one of the most picturesque towers in the country. Its original height was 356 ft., which was diminished by about 60 ft. by the removal of the spire in 1741. It still towers above all the buildings of the city, and in that flat country is seen far and wide.

The finest of the town-halls of Belgium, built originally as such, is that of Brussels (woodcut No. 598), commenced in 1401, and finished in 1455. In dimensions it is inferior to the cloth-hall at Ypres, being only 264 ft. in length by about 50 in depth, and its details, as may be supposed from its age, are less pure; but the spire that surmounts its centre, rising to the height of 374 ft., is unrivalled for beauty of outline and design, not only by any spire in Belgium, but it might almost be said by any one in Europe. Notwithstanding its late age, there is no extravagance, either in design or detail, about it; but the mode in which the octagon is placed on the square, and the outline broken and varied by the bold and important pinnacles that group around it, produce a most pleasing variety, without interfering with the main constructive lines of the building. The spire, properly so called, is small, so that its open-work tracery is pleasing and appropriate, which is more than can be said for some of its German rivals, where it is quite unsuited to the large scale on which it is attempted.

Next in importance to this is the well-known and beautiful town-hall at Louvain (1448–1463), certainly the most elaborately decorated piece of Gothic architecture in existence. Though perhaps a little over done in some parts, the whole is so consistent, and the outline and general scheme of decoration so good, that little fault can be found with it. In design it follows very closely the hall at Bruges, but wants the tower, which gives such dignity to those at Brussels and Ypres.

Towards the end of the same century (1481) the inhabitants of Ghent determined on the erection of a town-hall, which, had it ever been finished, would have surpassed all the others in size and richness, though whether it would have equalled them in beauty is more than doubtful. After a century of interrupted labour the design was abandoned before it was more than two-thirds completed, and now that age has softened down its extravagances, it is a pleasing and perhaps beautiful building. Nothing, however, can exceed the extent of tormented and unmeaning ornament that is spread over every part of it, showing great richness certainly, but frequently degenerating into very bad taste. The architecture of the hall at Ypres, though only half or one-third as costly in proportion to its extent, is far nobler and more satisfactory than this ever could have been. But the day of true art was past, and its place was sought to be supplied by the mere extent of ornament.

The same remarks apply to the town-hall at Oudenarde, a building evidently meant as a copy of that at Louvain, combined with a belfry, an imitation of that at Brussels. The result is certainly rich and pleasing in its general effect; but the details of its age (1525) have marred the execution, and given to the whole a clumsiness and a



598. View of Town-hall, Brussels.

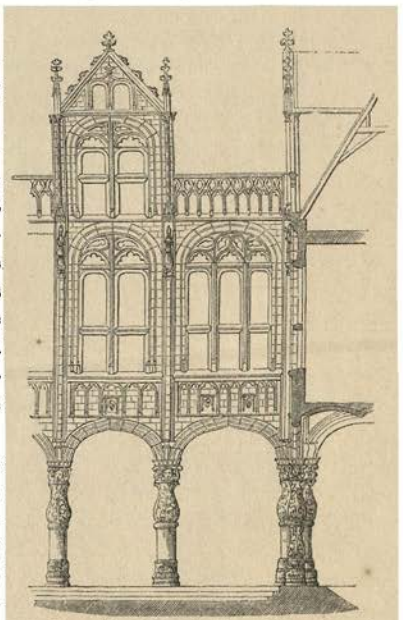
flimsiness that greatly detract from its beauty. Even the effect of the belfry is spoiled by the temptation to exhibit a masonic trick, and make it appear as if standing on the two slight pillars of the porch. It is clever, but apparent stability is as necessary to true architectural beauty as real stability is to the dignity of the art.

Among the smaller halls that of Mons is perhaps the most elegant, and very similar to that of St. Quentin, which, though now in France, was a Flemish city at the time of its erection.

In the days of her magnificence Mechlin attempted the erection of a splendid hall, which was intended to rival those of any of the neighbouring towns. Civic troubles, however, put a stop to the work before it was carried so far as to enable us now even to determine what the original design was.

Among minor edifices of the same class may be mentioned the cloth-halls of Louvain and Ghent, both of the best age, though small; and the Boucheries or meat-markets of Diest, Ypres, Antwerp, and other towns—the boatmen's lodge at Ghent, and the burgesses' lodge at Bruges, besides numerous other scattered memorials of civic magnificence that meet one everywhere in this great emporium of mediæval industry.

Of palaces, properly so called, little remains in Belgium worthy of notice, unless it be the palace of the Bishop of Liège (woodcut No. 599), which, as far as size and richness of decoration are concerned, almost deserves the reputation it has attained. It was, however, unfortunately commenced at an age (1508) when the Gothic style was all but extinct, and it is impossible to admire its stunted columns and flat arches in such immediate proximity with the purer works of the preceding centuries.



599. Part of the Bishop's Palace, Liège. No scale.

Of the same age and style is the Exchange at Antwerp (1515). This building is more pleasing in its details, the merchants having apparently clung longer to the spirit that animated their forefathers than the clergy, who earlier felt the influence of the Italian Renaissance. Neither of them can be called in strictness Gothic buildings, for the true spirit of that art had perished before they were commenced.

Many of the private dwelling-houses in the Flemish cities are picturesque and elegant, though hardly rising to the grade of specimens of fine art; but when grouped together in the narrow winding

streets, or along the banks of the canals, the result is so varied and charming that we are inclined to ascribe to them more intrinsic beauty than they really possess as individual designs. Most of them are of brick, and using the brick undisguisedly, and depending wholly on such forms as could be given to that material, they never offend our taste by shams; and the honest endeavour of the citizens to ornament their dwellings externally meets here with the success that must always follow such an attempt. To exhibit this class of structures adequately would require far more illustration than is compatible with a work like the present, and would occupy the space that more properly belongs to buildings of a larger and more monumental class, and of higher pretensions to architectural effect, both in their design and the mode in which it is carried out.

BOOK V.

GERMANY.

CHAPTER I.

CONTENTS.

History of style — St. Gereon, Cologne — Churches at Gelnhausen — Marburg — Cologne Cathedral — Friburg — Strasburg — St. Stephen's, Vienna — Nuremburg — Mühlhausen — Erfurth.

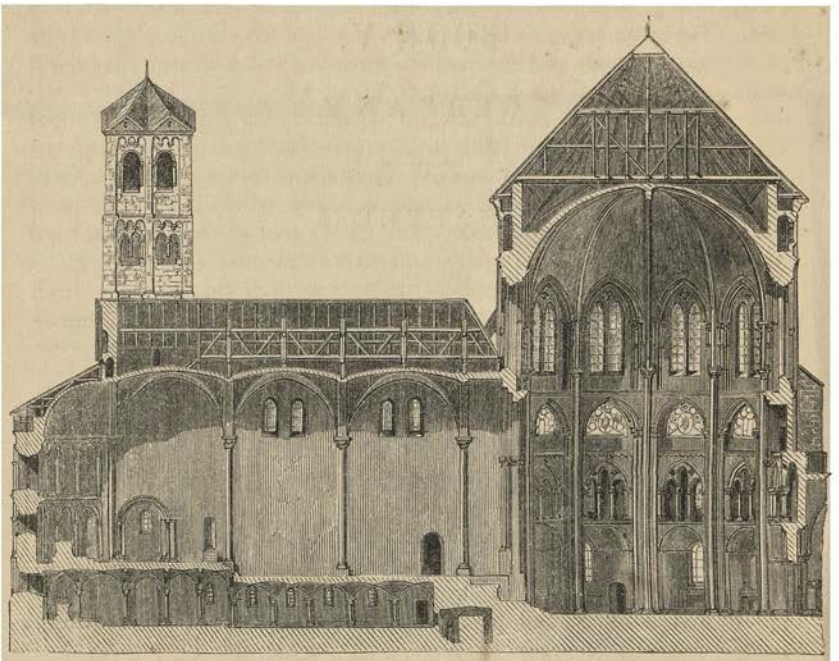
POINTED STYLE IN GERMANY.

HAVING now traced the history of the pointed style of architecture from its origin in France till it reached its highest degree of development and culture in that country and in Belgium, it will now be convenient to return to the point where we left the history of the art in Germany, and resuming the thread of our narrative to follow its history in that country, and point out the peculiarities which it there assumed.

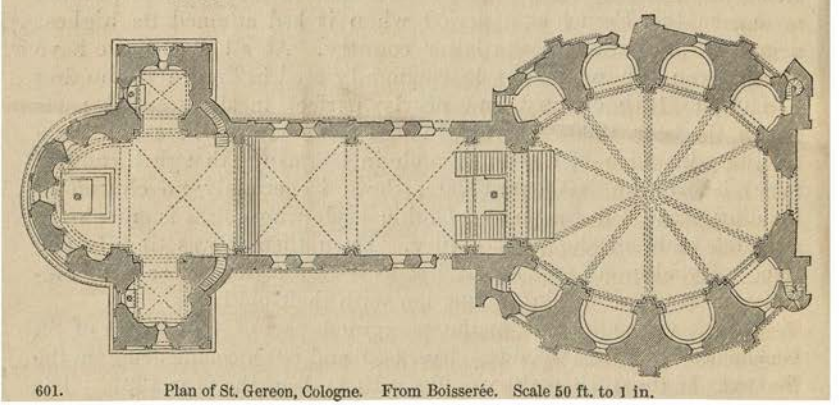
It is scarcely necessary to repeat—what has been already perhaps sufficiently insisted upon—that the Germans borrowed their pointed style from the French at a period when it had attained its highest degree of perfection in the latter country. At all events, we have already seen the pointed style commonly used in France in the first half of the 12th century, and nearly perfect in all essential parts before the year 1200; whereas, though there may be here and there a solitary instance of a pointed arch in Germany (though I know of none) before the last-named date, there is certainly no church or building erected in the pointed Gothic style whose date is anterior to the first years of the 13th century. Even then it was timidly and reluctantly adopted, and not at first as a new style, but as a modification to be employed in conjunction with their old forms.

This is very apparent in the polygonal part of the church of St. Gereon at Cologne (woodcuts Nos. 600 and 601), commenced in the first year of the 13th century, and vaulted about the year 1227. The plan of the building is eminently German, being in fact a circular nave, as contradistinguished from the French chevet, and is a fine bold attempt at a domical building, of which it is among the last examples. In plan it is an irregular decagon, 55 ft. wide over all, north and south, and 66 ft. in the direction of the axis of the church. Notwithstanding the use of the pointed arch, the details of the building are as unlike

the contemporary style of France as the plan; it is, in fact, nearly a century behind in the employment of all those expedients which give character and meaning to the true pointed style.



600. Section of St. Gereon, Cologne. From Boisserée, Nieder Rhein. Scale 50 ft. to 1 in.



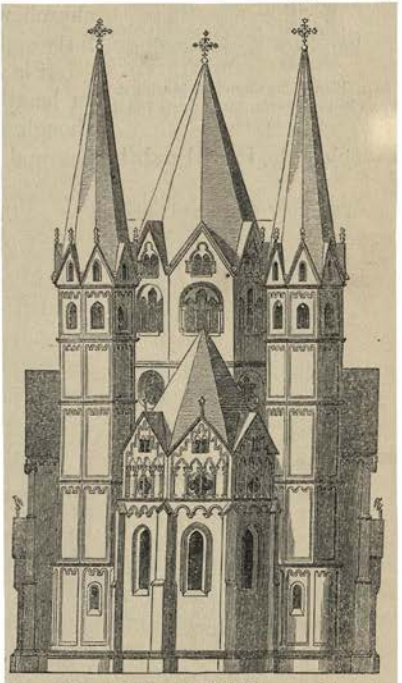
601. Plan of St. Gereon, Cologne. From Boisserée. Scale 50 ft. to 1 in.

Another church in the same city, St. Cunibert, is a still more striking example of this. Commenced in the first decade of the 13th century, and dedicated in 1248, the very year in which it is said the foundation-stones of the cathedral were laid, it still retains nearly all the features of the old German style, and though pointed arches are

introduced, and even tracery to a limited extent, it is still very far removed from being what could be considered an example of the new style.

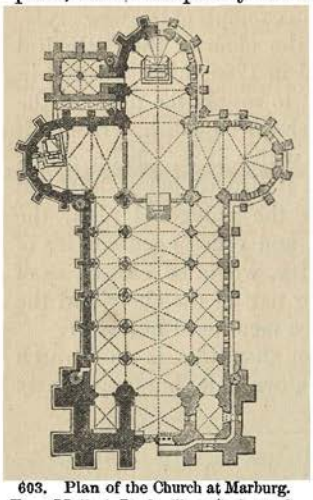
More advanced than either of these is the choir of the Cathedral of Magdeburg, said to have been commenced in 1208, and dedicated in 1254. This was built, as before mentioned, to supply the place of the old circular church of Otho and his English queen Edith. Hence it naturally took the French chevet form, of which it is, I believe, the earliest example in Germany, and of which it also copied rudely and imperfectly the details. Still it possesses the polygonal plan, the graduated buttresses, the decorative shafts, and other peculiarities of the French style, and if found in that country, would be classed as of about the same age as St. Denis. The upper part of the choir and the nave are of very much later date, and will be mentioned hereafter.

A more interesting example of transition than this is the church at Gelnhausen, unfortunately not of well-known date, but apparently built in the middle of the 13th century, and the choir, it is said, not finished till 1370. Its interest lies in its originality, for though adopting the pointed arch, it does so in a manner very different from the French, and as if the architects were determined to retain a style of their own. In general design its outline is very like that of the church at Sinzig (woodcut No. 457), and it even attempts to copy its galleries, but allowing their pillars to stand in front of windows, a mistake afterwards carried in Strasburg and elsewhere to a far more fatal extent. Taken altogether, the style here exhibited is light and graceful; but it neither has the stability of the old Round-arched Gothic, nor the capabilities of the French pointed style. The church of Sta. Maria attached to the cathedral at Trèves is another of the anomalous churches of this age: its plan has already been given (woodcut No. 442), and was probably suggested by the form of the old circular building which it supplanted (1227 to 1243). Perhaps from its proximity to France it shows a more complete Gothic style than either of those already mentioned; still the circular arch continually recurs in doorways and windows, and altogether the uses of the pointed forms and the general arrangement of parts and details cannot be said to be well understood. There is, however, a novelty, truly German, in its



602. East-end of Church at Gelnhausen. No scale.

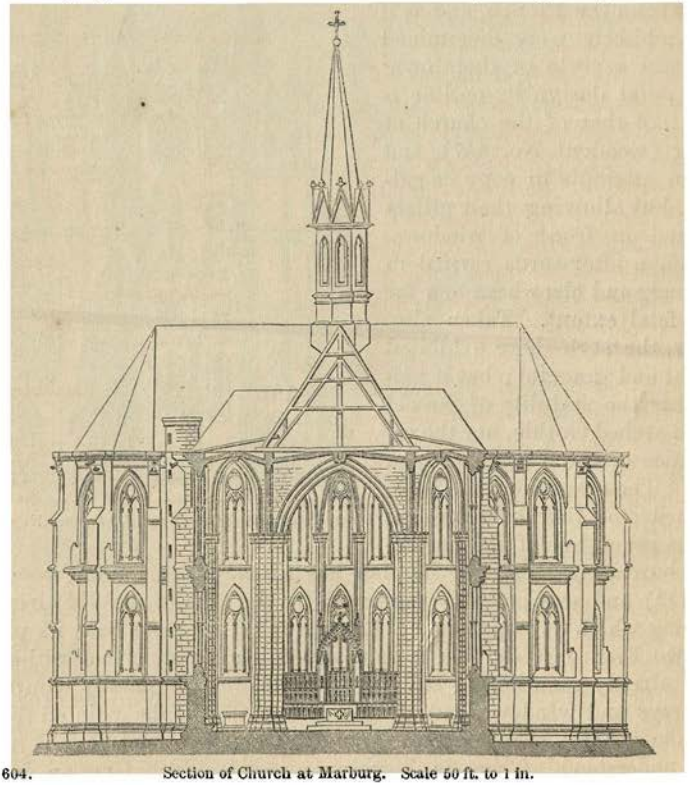
plan, and a simplicity about its arrangement, which make it the most pleasing specimen of the age, and standing on the foundation of the old church of Sta. Helena, and grouped with the Dom or cathedral, it yields in interest to few churches in Germany



603. Plan of the Church at Marburg. From Moller's Denkmäler. Scale 100 ft. to 1 in.

From these we may pass at once to two churches of well-authenticated date and of purely French style. The first that of St. Elizabeth at Marburg. Her name has been already mentioned (p. 588) as adding interest and sanctity to the old castle on the Wartburg. Four years after her death she was canonised, and in the same year, 1235, the foundation was laid of this beautiful church, which was completed and dedicated forty-eight years afterwards, in 1283.

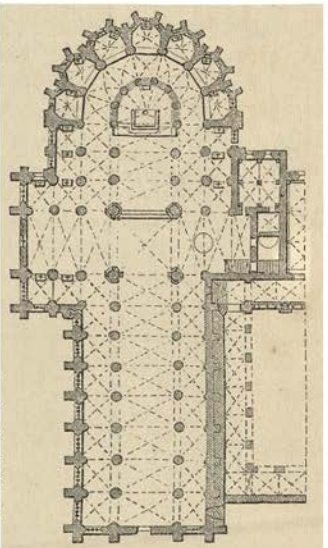
It is a small church, being only 208 ft. in length by 69 in width internally, and though the details are all of good early French style, it still exhibits several *Germanisms*, being triapsal in plan,



604. Section of Church at Marburg. Scale 50 ft. to 1 in.

and the three aisles being of the same height. The latter must be considered as a serious defect, for besides the absence of contrast, either the narrow side-aisles are too tall or the central one too low. This has also caused another defect, of two stories of windows throughout in one height of wall, and without even a gallery to give meaning to such an arrangement. No French architect ever fell into such a mistake, and it shows how little the builders, who could not avoid such a solecism, understood the spirit of the style they were copying. The west front with its two spires is somewhat later in date, but of elegant design and pleasingly proportioned to the body of the church, which is rarely the case in Germany.

The other church is that at Altenburg, not far from Cologne, on the opposite side of the river Rhine. The foundation-stone was laid in 1255, and the chapels round the choir completed within a few years of that time, but the works were then interrupted, and the greater part of the church not built till the succeeding century. Like all the early churches of the Cistercian Order it is without towers, and extremely simple in its outline and decorations. It is, in fact, almost a copy of the abbey of Pontigny (woodcut No. 558), which was built fully a century earlier, and though it does show some advance in style in the introduction of tracery into the windows, and more variety of outline externally, it is remarkable how little progress it evinces in the older parts. In the subsequent erection there are some noble windows filled with tracery of the very best class, which render this church the best counterpart Germany can produce for our own Tintern Abbey, which it resembles in many respects. Indeed, taken altogether, this is perhaps the most satisfactory church of its age and style in Germany, in the erection of which the fewest faults have been committed. It has been recently rescued from ruin by the King of Prussia, but its beautiful conventual buildings have been destroyed by fire.

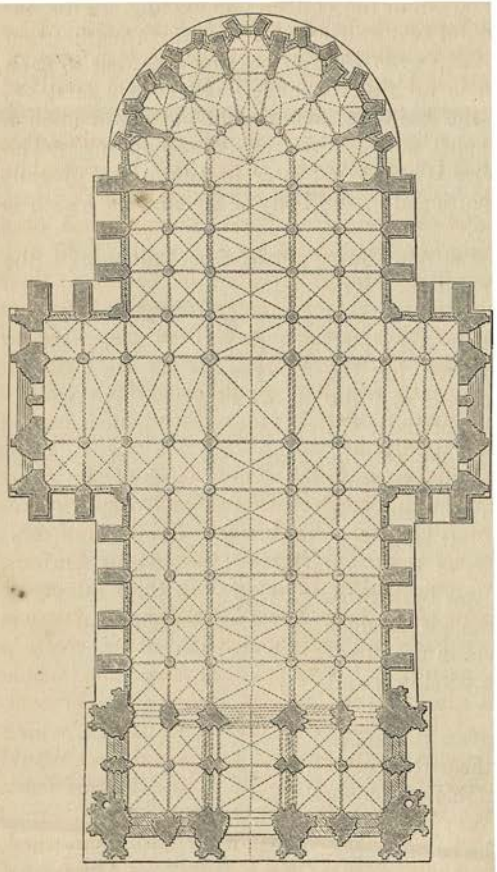


605. Plan of Church at Altenburg. Scale 100 ft. to 1 in.

These examples bring us to the great typical cathedral of Germany, that of Cologne, which is certainly one of the noblest temples ever erected by man in honour of his Creator. In this respect Germany has been more fortunate than either France or England, for though in the number of edifices in the pointed style and in beauty of design these countries are far superior, Germany alone possesses one pre-eminent example in which all the beauties of its style are united.

Generally speaking, it is assumed that the building we now see is that commenced by Conrad de Hochsteden in the year 1248. More

recent researches have proved that what he did was to rebuild or restore the old double apse cathedral of the 9th century. But the examples just quoted, if no other proof were available, are sufficient to show that the Gothic style was hardly then introduced into Germany, and but very little understood when practised. It seems that the present building was begun about the year 1270–1275, and the choir completed in all essentials as we now find it by the year 1322.[1] Had the nave been completed at the same rate of progress, it would have shown a wide deviation of style, and the western front, instead of being erected according to the beautiful design preserved to us, would have been covered with stump tracery, and other vagaries of the late German school, all of which are even now observable in the part of the north-west tower actually erected. As it is now being completed according to the original design, one of its principal beauties will be the uniformity of style that will reign throughout. In dimensions it is the largest cathedral of northern Europe, its extreme length being 445, its extreme breadth 250, and its superficies 81,464 ft., which is 10,000 ft. more than are covered by Amiens, and at least 15,000 more than Amiens was originally designed to cover. On comparing the eastern halves of these two from the centre of the intersection of the transept, it will be found that Cologne is an exact copy of the French cathedral, not only in general arrangement, but also in dimensions, the only difference being a few feet of extra length



606. Plan of Cathedral at Cologne. From Boisserée. Scale 100 ft. to 1 in.

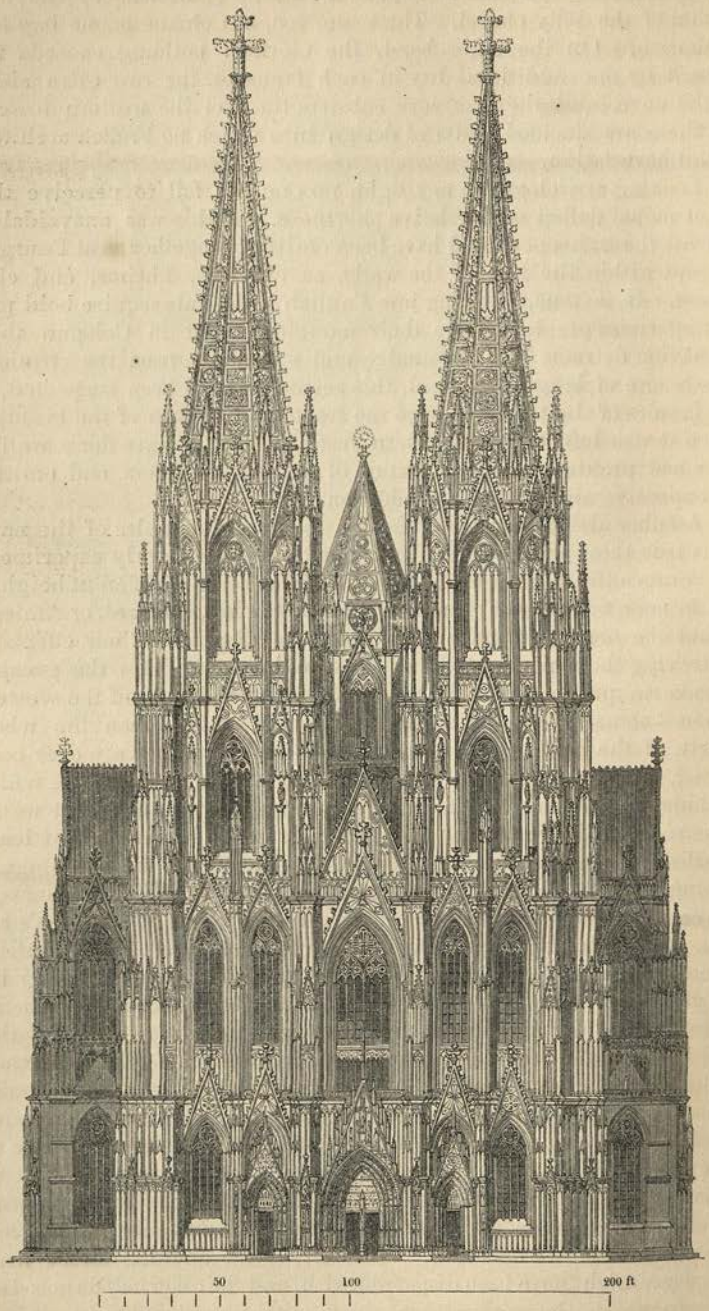
[1] The best *résumé* of the arguments on this question will be found in the controversy carried on by F. de Verneilh, the Baron de Rosier, and M. Boisserée, in Didron's Annales Archéologiques, vol. vii. *et seq.*

of the choir at Cologne, more than made up at Amiens by the projection of the lady chapel. The nave, too, at Cologne is one bay less in length. On the other hand, the German building exceeds the French by one additional bay in each transept, the two extra aisles in the nave, and the enormous substructures of the western towers. All these are decided faults of design into which no French architect would have fallen.

Looking at Cologne in any light, no one can fail to perceive that its principal defect is its relative shortness. If this was unavoidable, at least the transept should have been omitted altogether as at Bourges, or kept within the line of the walls, as at Paris, Rheims, and elsewhere. It is true, our long low English cathedrals require bold projecting transepts to relieve their monotony; but in Cologne their projection detracts both internally and externally from the requisite appearance of length. Indeed, this seems to have been suspected, as the façades of the transepts were the least finished parts of the building when it was left, and the modern restorers would have done well if they had profited by the hesitation of their predecessors, and omitted an expensive and detrimental addition.

Another defect before alluded to is the double aisles of the nave. It is true these are found at Paris, but that was an early experiment. At Bourges the fault is avoided by the aisles being of different heights; but in none of the best examples, such as Rheims, Chartres, or Amiens, would the architects have been guilty of dispersing their effects or destroying their perspectives as is done here. Perhaps the greatest mistake in proportion is the mass and enormous height of the western towers—actually greater, according to the design, than the whole length of the building: a circumstance which, if they are ever completed, will give to the whole cathedral a look of shortness, which nothing can redeem. With such a ground-plan a true architect would have reduced their mass one-half, and their height by one-third at least.

Besides its great size, the cathedral of Cologne has the advantage of having been designed at exactly the best age; while, as before remarked, the cathedrals of Rheims and Paris were a little too early, St. Ouen's too late. The choir of Cologne, which we have seen to be of almost identical dimensions with that of Amiens, excels its French rival internally by its glazed triforium, the exquisite tracery of the windows, the general beauty of the details, and a slightly better proportion between the height of the aisles and clerestory. But this advantage is lost externally by the forest of exaggerated pinnacles which crowd round the upper part of the building, not only in singular discord with the plainness of the lower story, but hiding and confusing the perspective of the clerestory, in a manner as objectionable in a constructive point of view as it is to the eye of an artist. Decorated construction is, no doubt, the great secret of true architecture; but like other good things, this may be overdone. One-half of the abutting means here employed might have been dispensed with, and the other half disposed so simply as to do the work without the confusion produced here. When we turn to the interior to see what the vault is, which this mass of



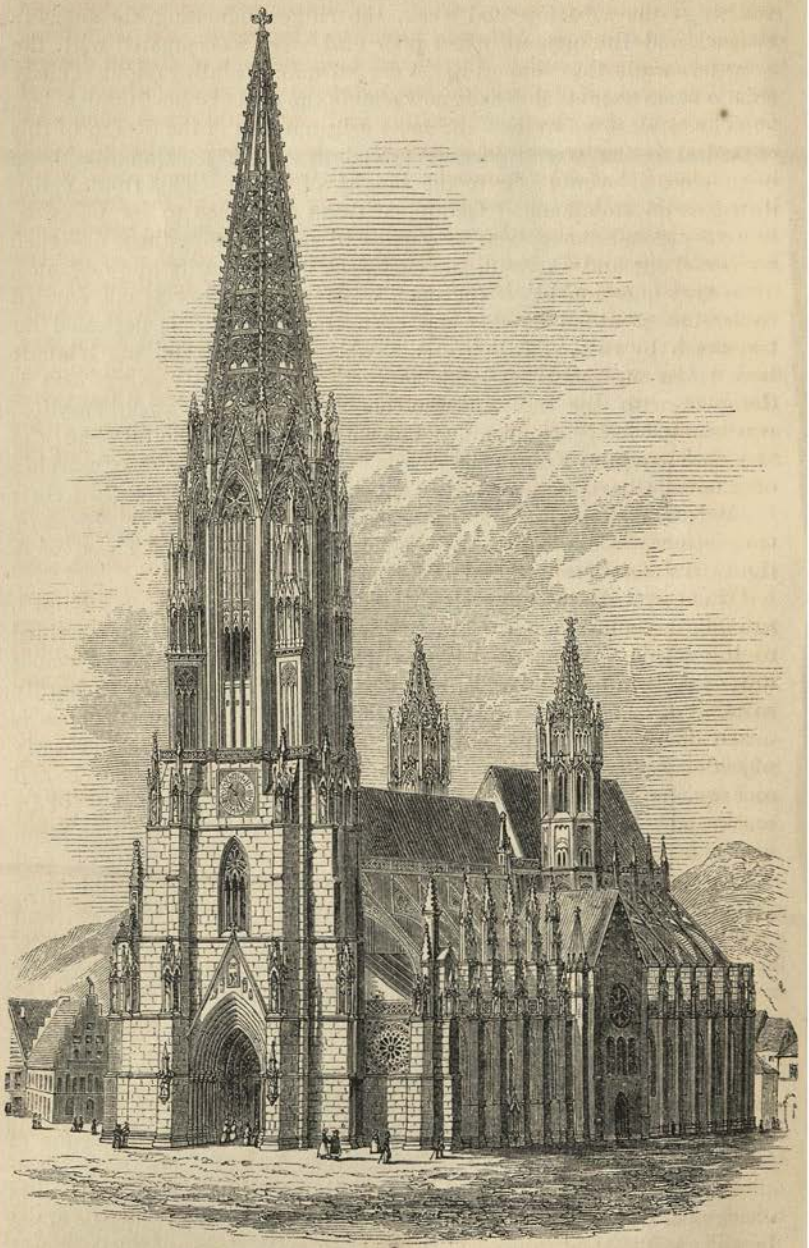
607. Intended Western Façade of Cathedral of Cologne. From Boisserée.

abutments is provided to support, we find it with all the defects of French vaulting—the ribs few and weak, the ridge undulating, the surfaces twisted, and the general effect poor and weak as compared with the gorgeous walls that support it. Very judicious painting might remedy this to some extent; but as it now stands the effect is most unpleasing.

The noblest as well as the most original part of the design of this cathedral is the western façade (woodcut No. 607). Had this been completed, it would rise to the height of 510 ft. This front, considered as an independent feature, without reference to its position, is a very grand conception. It equals in magnificence those designed for Strasburg and Louvain, and surpasses both in purity and elegance. It is very questionable if the open work of the spires is not carried to far too great an extent; and even the lower part is designed far too much by rule. M. Boisserée says, "the square and the triangle here reign supreme;" and this is certainly the case: every part is designed with the scale and the compasses, and with a mathematical precision perfectly astonishing; but we miss all the fanciful beauty of the more irregular French and English examples. The storied porches of Rheims, Chartres, and Wells comprise far more poetry within their limited dimensions than is spread over the whole surface of this gigantic frontispiece. Cologne is a noble conception of a mason. These were the works of artists in the highest sense of the word.

It is certainly to be regretted that there is no contemporary French example to compare with this, so that we might have been enabled to bring this to a clearer test than words can do. St. Ouen's comes nearest to it in age and style, but it is so very much smaller as hardly to admit of comparison; for though the length of the two churches is nearly identical, the one covers 81,000 square feet, the other only 47,000. Yet so judicious is the disposition of the smaller church, and so exquisite its proportions, that notwithstanding the late age of its nave, and the barbarism of its modern front, it is internally a more beautiful and almost as imposing a church as that of Cologne, and externally a far more pleasing study as a work of art. Had Marc d'Argent commenced his building at the same time as Cologne, and seen it completed, or left his design for it before 1322, even with its smaller dimensions it would have been by far the nobler work of art of the two. These, however, are vain speculations. We see in Cologne the finest specimen of masonry attempted in the middle ages; and notwithstanding its defects, we may hope to see in the completed design a really beautiful and noble building, worthy of its builders and of the religion to which it is dedicated.

Fortunately we are not left only to the drawings of the façade of Cologne to enable us to judge of what the effect of these open-work spires would be if completed; for at Friburg, in the Brisgau, there is a contemporary example, commenced in 1283, and finished in 1330. This fine spire is identical in style with the Cologne designs, and perhaps on the whole even better, certainly purer and simpler both in outline and detail, though it is not clear that the richer ornament of Cologne would not be more in accordance with this description of lace-work.



608. View of the Church at Friburg. From Moller's Denkmäler.

The total height of the spire at Friburg is 385 ft. from the ground, and is divided into three parts. The lower is a square, plain and simple in its details, with bold prominent buttresses, and containing a very handsome porch. The second is an octagon of elegant design, with four triangular pinnacles or spirelets at the angles, which break most happily the change of outline, and out of this rises, somewhat abruptly, the spire 155 ft. in height. An English architect would have placed 8 bolder pinnacles at its base; a French one would have used a gallery, or taken some means to prevent the cone from merely resting on the octagon. This junction between the two is poor and badly managed; but after all, the question is, whether or not the open spire is not a mistake, which even the beauty of detail found here cannot altogether redeem. It is not sufficient to say it is wrong, because a spire is a roof, and this is not. It is true a spire was a roof, and it still retains the place of one, and consequently should suggest the idea; but this is not absolutely indispensable; and if the tower were insufficient to support the apparent weight of a solid spire, or for any such reason, the deviation would be excusable, but such is not the case here, nor at Cologne.

Indeed, it seems that the whole is only another exemplification of the ruling idea of the German masons, an excessive love of "*tours de force*," and an inordinate desire to do clever things in stone, which soon led them into all the vagaries of their after Gothic; here it is comparatively inoffensive: still I feel convinced that if one-half the openings of the tracery were filled up, or only a central trefoil or quatrefoil left open in each division, the effect would be far more pleasing and satisfactory.

In the spires that flank the transepts, the open-work is wholly unobjectionable, owing to the smallness of the scale; but in the main and principal feature of the building the case is very different: dignity and majesty are there required; and this, the flimsiness, as it might almost be called, of the open work, goes far to destroy.

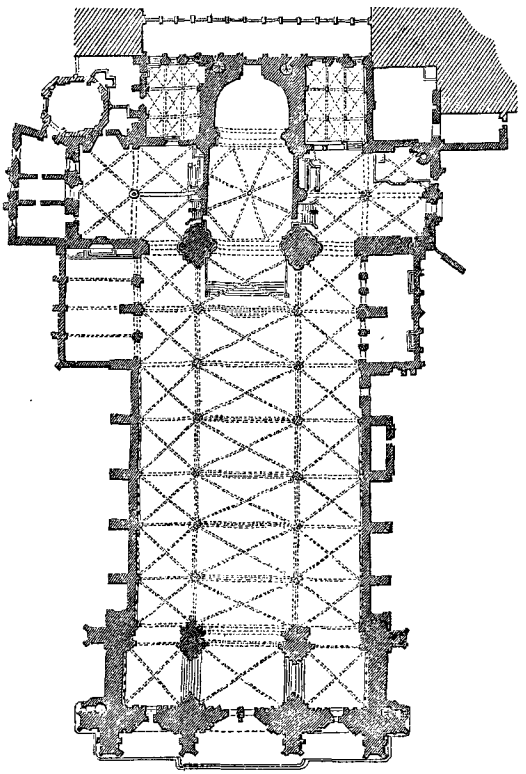
The nave of this church is a fair specimen of the German Gothic of the age, being contemporary with the spire, or perhaps a little earlier; but the want of the triforium internally, and the consequent heavy mass of plain wall over the pier-arches, give it a poor and weak appearance. The choir, a work of the 15th century, runs into all the extravagance of the later German style, its only merits being its size and lightness.

Of the other open-work spires of Germany, one of the most beautiful is that of Thann in Alsace. Here the octagonal part is so light, that anything more solid than the tracery that forms the spires would seem to crush it.

Besides these, there is a pleasing example at Esslingen; one attached to the cathedral at Meissen, in favour of which nothing can be said; and that adorning the two towers of the façade of the cathedral of Berne, which, because they are so small relatively to the towers they surmount, and are in fact mere ornaments, are pleasing and graceful terminations to the front.

Strasburg.

Next in rank to Cologne among German cathedrals is that at Strasburg. It is, however, so much smaller as hardly to admit of a fair comparison, covering, even with its subsidiary adjuncts, little more than 60,000 square feet. The whole of the eastern part of this church belongs to an older basilica, built in the 11th and 12th centuries, and is by no means remarkable either for its beauty or its size, or at least is so overpowered by the nave, which has been added to it, as to render its appearance somewhat insignificant. The nave and the western front are the glory and boast of Alsace, and possess in a remarkable degree all the beauties and defects of the German style.



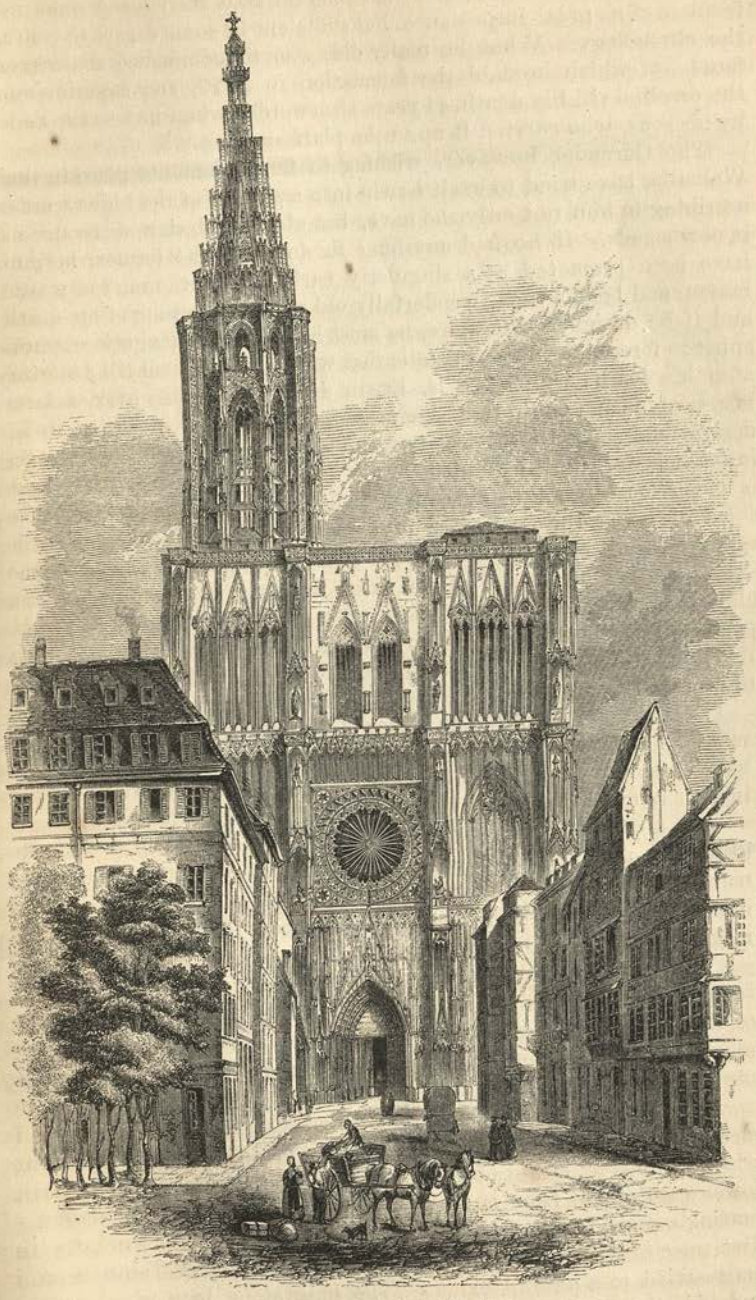
609. Plan of Strasburg Cathedral. Scale 100 ft. to 1 in.

It is not known when the nave was commenced, but probably in the early half of the 13th century, and it seems to have been finished about the year 1275, a date which, if authentic, is in itself quite sufficient to settle the controversy as to whether any part of Cologne is earlier, everything we see here being of an older style than anything in that church.

Be this as it may, the details are pure and beautiful, and the design of singular boldness. The central aisle is 53 ft. 2 in. wide from centre to centre of the piers, and the side-aisles 34 ft. wide, while the corresponding dimensions at Cologne are only 48 ft. and 27 respectively. Notwithstanding this, the vault at Strasburg is only 101 ft. in height against 145 at Cologne.

This comparative lowness of the nave at Strasburg is greatly in its favour. The length, which is only 250 ft., is made the most of, and the shortness of the cathedral is not perceived.

It does not appear that Erwin von Steinbach had anything to do with this part of the structure, beyond repairing the vault when



610. West Front of Cathedral at Strasburg.

damaged by fire in 1298, at which time he also introduced some new features of no great importance, but sufficient in some degree to confuse the chronology. What he really did, was to commence the western façade, of which he laid the foundation in 1277, and superintended the erection till his death, 41 years afterwards, when he was succeeded by his sons, who carried it up to the platform in 1365.

The Germans, however, wishing to find a name to place in their Walhalla, have tried to exalt Erwin into a genius of the highest order, ascribing to him not only the nave, but also the design of the spire as it now stands. If he had anything to do with the former, he must have been promoted at a singularly early age to the rank of master-mason, and been a most wonderfully old man at the time of his death; and if he designed the spire, he must have had a strangely prophetic spirit to foresee forms and details that were not invented till a century after his death! The fact is, Erwin did no more than every master-mason of his age could do. There is no novelty or invention in his design, and only those mistakes and errors which all Germans fell into when working in Pointed Gothic. In the first place, the façade is much too large for the church, which it crushes and hides. Instead of using the resources of his art to conceal this defect, he made the vault of the ante-chapel equal in height to that of Cologne. Consequently the centre of the great western rose window is just as high as the apex of the vault of the nave. It is true it can be seen in perspective from the floor of the church, but the arrangement seems as if it had been expressly intended to make the church both low and out of proportion.

The spiral staircases at the angles of the spire are marvels of workmanship, and the whole is well calculated to excite the wonder of the vulgar, though it must be condemned by the man of taste as very inferior in every respect to the purer designs of an earlier age.

It is not known whether the original design comprised two towers, like those of the great French cathedrals, or was intended to terminate with the flat screen façade. Probably the latter was the case, as mass and not proportion seems to have been this architect's idea of magnificence.

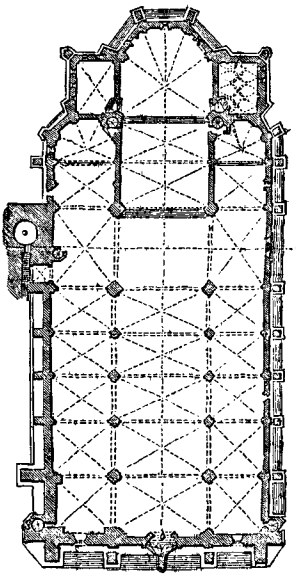
The spire that now crowns this front, rising to a height of 468 ft. from the ground, was not finished till 1439, and betrays all the faults of its age. The octagonal part is tall and weak in outline, the spire ungraceful in form, and covered with an unmeaning and constructively useless system of tracery.

Besides the fault of proportion for which the design of Erwin is clearly blameable, all his work betrays the want of artistic feeling which is characteristic of the German mason. Every detail of the lower part of the front is wire-drawn and attenuated. The defect of putting a second line of unsymmetrical tracery in front of windows, the first trace of which we remarked upon in speaking of Gelnhausen, is here carried to a painful extent. The long stone bars which protect and hide the windows are admirable specimens of masonry, but they are no more beauties than those which protect our kitchen windows in

modern times. The spreading the tracery of the windows over the neighbouring walls, so as to make it look large and uniform, is another solecism found both here and at Cologne, utterly unworthy of the art, and not found in, I believe, a single instance in France and England, where the style was so much better understood than here.

Altogether the cathedral at Strasburg is a building imposing from its mass, and fascinating from its richness; but there is no building in either France or England where such great advantages have been thrown away in so reckless a manner and by so unintelligent a hand.

The cathedral at Ratisbon is a far more satisfactory specimen of German art than that of Strasburg. It is a small building, only 272 ft. in length, and 114 in breadth internally, and covering about 32,000 ft. It was commenced in the year 1275; the works were continued for more than two centuries, and at last abandoned before the completion of the church.



611. Plan of Ratisbon Cathedral. Scale 100 ft. to 1 in.

As will be seen from the plan (woodcut No. 611), it is much more German than French in its arrangements, having three apses instead of a chevet. The side aisles are wide in proportion to the central one, the transept subdued, and altogether it is more like the old round Gothic basilica than the French church. It has two stories of windows in the apse, as at Marburg. There the arrangement is unmeaning and offensive; here the nave has side aisles and a clerestory: thus the upper windows of the apse are a continuation of the clerestory windows of the nave, and the effect is not unpleasing. The details of this church are singularly pleasing and elegant throughout, and produce on the whole a harmony not commonly met with in German churches of this age and style.

If size were any real test of beauty, the cathedral at Ulm ought to be one of the finest in Germany, being just twice as large as that at Ratisbon, covering 63,800 ft. So far also as constructive merit is concerned, it is perhaps the best; for though I have no plan I can quite rely upon, I believe that not more than one-fifteenth of the area is occupied by the supports; nor is this church surpassed by many in sharp and clever mechanical execution of the details. With all this it would be difficult to find a colder and more unimpressive design than is here carried out: both internally and externally, it is the work of a very clever mason, but a singularly bad artist. The freemasons had, when it was founded (1377), got possession of the art in Germany; and here they carried their system to its acmé, and with a result which

every one with the smallest appreciation of art can perceive at once. It is said that in the original design the outer range of pillars, dividing the side aisle into two, was to have been omitted, which would have made it even worse than it is. Its one western tower, had it been completed, would have been more beautiful than that at Strasburg; and besides being actually higher (483 ft., according to the still-preserved design), would have appeared taller from standing alone. Its form, too, is more pleasing; and though its details are far more suited for execution in cast-iron than in stone, it would have rivalled, perhaps surpassed, those at Antwerp or Mechlin. It was, however, carried to the height of only 220 ft., when, either from the want of funds or the failure of the foundation, the work was abandoned.

St. Stephen's of Vienna ranks fourth or fifth among the great churches of Germany, both for size and richness of decoration. Its length, internally, is 337 ft., its width 115, and it covers about 52,000 square ft. As far, however, as the body of the church is concerned, it would be difficult to find anything in all Europe worse designed or more inappropriately ornamented. Internally the three aisles are nearly of the same width and height. There is no clerestory, but one enormous wooden roof, 108 ft. in height above the walls, covers, like an extinguisher, the whole body of the church. The central aisle is only 92 ft. high internally, and covered with a vault of most unpleasing form. The great glory of this church consists in its two spires, one of which is finished, the other only carried to about one-third of its intended height. Their position is unfortunate, as they are placed where the transepts should be, so that they neither form a façade nor dignify the sanctuary. In itself, however, the finished spire is the richest, and, excepting that at Friburg, perhaps the most beautiful of all those in Germany. Its total height, exclusive of the eagle, is 441 ft., rising from a base of about 64 ft., and gradually sloping from the ground to the summit, where it forms a cone of the unprecedentedly small angle of little more than 9 degrees. The transition from the square base to an octagonal cone is so gradual and so concealed by ornament, that it is difficult to say where the tower ends and the spire begins. This gives a confusion and weakness to the design by no means pleasing. Indeed the whole may be taken as an exemplification of all the German principles of design carried to excess, rather than as a perfect example of what such an object should be. It deserves to be remarked that there is no open work in the spire, though, from its own tenuity and the richness of the tower, there is no example where it would have been less objectionable.

In adopting the pointed-arched style, the Germans generally abandoned their favourite double-apse arrangement; and though they seldom adopted the whole of the chevet, preferring their own simple apse to it, it seems to have been only, or at least generally, where an old Round Gothic double-apse church existed previously, that this arrangement was continued after the commencement of the 13th century. Naumberg, the nave of which was commenced about the year 1200, is an instance of this. This was no doubt inserted between two older

612. View of the Spire of St. Stephen's, Vienna. From Chiesi Principali d' Europa.

apses, both of which were rebuilt at a later age, forming two very beautiful and extensive choirs. The whole makes a very pleasing and interesting church, though there certainly is an architectural incongruity in entering by the side, and the double-apse arrangement is unfamiliar and nearly unintelligible to us at the present time.

A still better example is the cathedral at Bamberg, which, judging from its date, ought to be in the complete pointed style. Though its east end dates from 1220, and the west 1257, it is still so completely transitional, and the pointed form so timidly used, that in France it would certainly be said that there was a mistake of at least a century in these dates. It is nevertheless a very fine church; and its four elegant towers flanking the two apses give it a local and at the same time a dignified character which we often miss in the imitations of French churches, too common at this age. At Naumberg unfortunately only three towers exist, the fourth never having been erected. This considerably mars the effect, when compared with the more complete edifice at Bamberg.

Augsburg is another example of this class, although of a good age, the rebuilding having commenced 1366. It is one of the ugliest and worst-designed buildings in Germany, with nothing but its size to redeem it. It is peculiar in having a chevet at one end and an apse at the other.

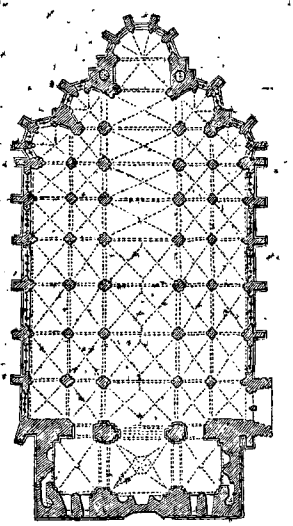
St. Sebald's Church at Nuremberg seems originally to have been a chevet turned the wrong way, to the eastern end of which a choir of somewhat exaggerated dimensions was added at a later age (1309–1377). This choir was not only placed unsymmetrically as regards the axis of the older part, but also as regards its own parts. It is however lofty and airy, and being lighted by a single row of tall windows, avoids the defect of the two-storied arrangement. These windows are 50 ft. high, and barely 8 ft. in width, which is far too narrow in proportion. Their mullions are nearly 40 ft. in height; and though triumphs of German masonic skill, are most unpleasing features of architectural design.

The other church at Nuremberg, that of St. Lawrence, is a finer and better designed church than St. Sebald's, and about one-third larger. It was commenced in 1275, and finished after 202 years' labour, and shows in itself all the beauties and defects of the German style, where they adopted pointed architecture, and used it according to their own feelings and tastes, instead of importing a French cathedral bodily, as was done at Cologne. The three aisles of the choir, as at St. Sebald's, are of one height, but the windows of two stories, and those of the polygonal part, of very tolerable form and tracery. In the nave, the side aisles are subordinated to the central part; and it must be confessed that the expansion of the chevet towards the east is judicious, though unfortunately here carried to exaggeration.

Externally the western front, though on a small scale, its two towers rising to the height of 250 ft. only, is as pleasing and pure a specimen of its class of design as Germany can afford. The flanks want buttresses and pinnacles, which, though not required in the round Gothic

style, can be but ill dispensed with in pointed architecture. In this instance they are particularly needed, as the building is overwhelmed, as is too often the case in Germany, by an enormously high ugly roof.

The principles of the French schools of art seem to have prevailed to a much greater extent in the north of Germany, and we have in consequence several churches of more pleasing design than those last mentioned. Among these is the cathedral at Halberstadt, a simple but beautiful church, not remarkable for any very striking peculiarities, but extremely satisfactory in general effect. The great church, too, at Xanten may be quoted as another very favourable specimen, though far more essentially German in its arrangement. The western front is older than the rest, and is German, wholly without French influence. It has no central entrance, but two bold massive towers. The church behind these is of the latter part of the 13th and the 14th centuries. It is generally good in detail and proportion, but arranged, as seen in the plan, in a manner wholly different from the French method, though common in all parts of Germany. The polygonal form is retained both for the apse and for the chapels, but without adopting the chevet with its surrounding aisle, nor the absolute seclusion of the choir as a priestly island round which the laity might circulate, but within whose sacred precincts they were not permitted to enter. It is observable that in those districts where chevets are most frequent, generally speaking, the Catholic religion has had the firmest hold. On the other hand, where the people had declined to adopt that arrangement, it was a sign that they were ripe for the Reformation, which accordingly they embraced as soon as the standard of rebellion was raised.



613. Plan of Church at Xanten. Scale 100 ft. to 1 in.

In the south of Germany we have already had occasion to remark on the tendency to raise the side aisles to the same height as the central one, which eventually became the rule in the great brick churches of Munich and other parts of Bavaria, the piers or pillars becoming mere posts supporting what was practically a horizontal roof. In the north the tendency seems to have been the other way—to exaggerate the clerestory at the expense of the aisles. A notable example of this is found in the nave at Magdeburg, where the side aisles are practically little more than one-third of the whole height of the church; and there being no triforium, the clerestory windows rest apparently on the vault of the side aisle. This has now no doubt a disagreeable effect, but when filled with painted glass the case must have been different, and the effect of this immense screen of brilliant colours must have been most beautiful.

A better example of this arrangement is found in the cathedral at

Metz, where, from its proximity to France, the details are better, and the whole style better understood. Externally, it must be confessed, the immense height of the clerestory gives to the church a wire-drawn appearance, very destructive of architectural beauty; but internally, partly from the effect of perspective and partly from the brilliancy of such glass as remains, criticism is disarmed. The result, however contrary to the rules of art, is most fascinating; and at all events it is an error in a far more pleasing direction than that of the southern architects.

Among the larger fragments of churches found in Germany, two in Bohemia deserve particular attention—one, St. Veit at Prague, projected in 1346, in imitation of the cathedral at Cologne, and intended almost to rival it in extent. It remains, however, like its great prototype, a choir with an unfinished transept, but less fortunate in being without any apparent chance of ever being completed. As might be expected from its age, it is less pure in style, but still a very noble design. The other, the church at Kuttenberg, commenced in 1330, is simpler in outline and better in proportion, though not quite so large. Had it been completed, it would have been surpassed by few churches in Germany. It too, however, is only a choir—a mere fragment of a noble but too ambitious design.

These may perhaps be considered the great and typical examples of the pointed style as applied to church architecture in Germany; but besides these there are numerous examples scattered all over the country, many of which, as less directly under French influence, display an originality of design, and sometimes a beauty, not to be found in the larger examples.

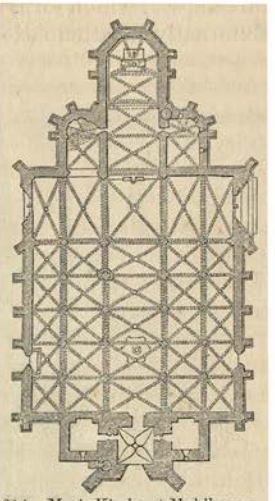
Among these is the church at Limburg on the Lahn. This building belongs to the early part of the 13th century, and exhibits the transitional style in its greatest purity, and with less admixture of foreign taste than is to be found in almost any subsequent examples. Though measuring only about 180 ft. by 75, it has, from its crown of towers and general design, a more imposing appearance externally than many buildings of far larger dimensions. The interior is also singularly impressive.

The church of St. Emeran at Ratisbon, a square building of about the same age and style, is chiefly remarkable for the extensive series of galleries which surround the whole of the interior, being in fact the application of the system of double chapels (see p. 586) to a parish church; not that vaulted galleries are at all rare in Germany, but generally speaking they are insertions; here they seem part of the original design.

At Schulporta in Saxony there is a very elegant church of the best age, and both in design and detail very different from anything else in Germany. Its immense relative length gives it a perspective rarely found in this country, where squareness is a much more common characteristic.

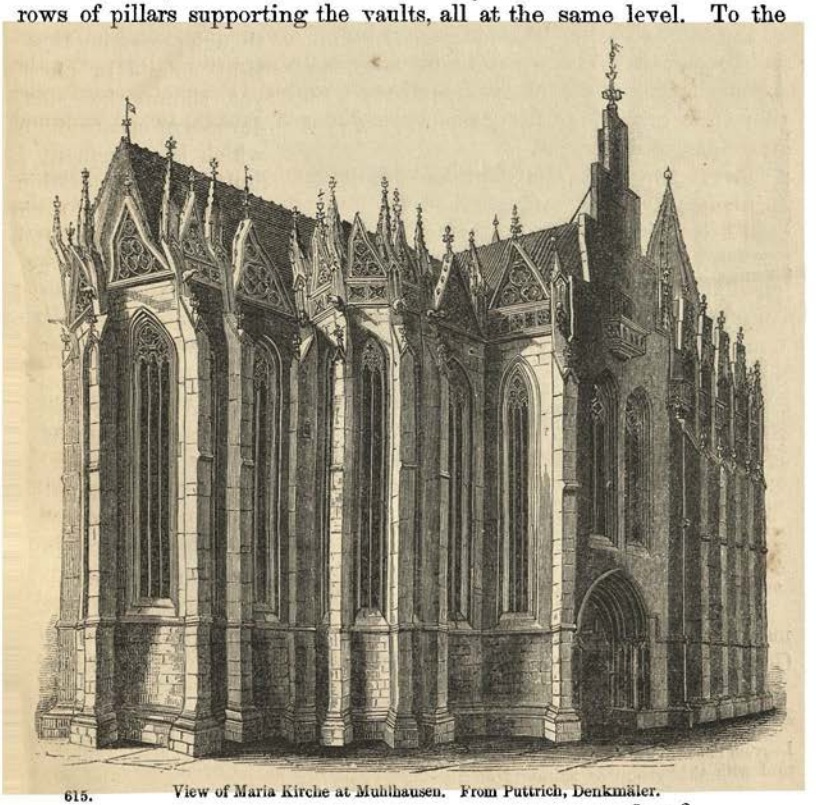
At Oppenheim is a church the choir of which is a simple and pleasing German apse with elongated windows. The nave, four bays

in length, is an elaborate specimen of German ornamentation in its utmost extravagance, and, considering its age, in singularly bad taste, at least the lower part. The clerestory is unobjectionable, but the tracery of the windows and walls of the side aisles shows how ingeniously it was possible to misapply even the beautiful details of the early part of the 14th century. At Werner's Chapel, Bacharach, on the Rhine, this is avoided, and, as far as can be judged from the fragment that remains, it must, if it ever was completed, have been one of the best specimens of German art in that part of the country. The nave of the cathedral at Meissen, though marked by many of the faults of German design, is still a beautiful example of well-understood detail.



614. Maria Kirche at Muhlhausen. Scale 100 ft. to 1 in.

As a purely German design nothing can surpass the Maria Kirche at Muhlhausen (woodcut No. 614). The nave is nearly square, 87 ft. and 105, and divided into 5 aisles by 4 rows of pillars supporting the vaults, all at the same level. To the



615. View of Maria Kirche at Muhlhausen. From Puttrich, Denkmäler.

west is a triple frontispiece, and to the east (woodcut No. 615) the three apses, which form so favourite an arrangement with the Germans. Externally its attenuation is painful to one accustomed to the soberer work of French architects; but this fault is not here carried to anything like the excess found in other churches. Internally the effect is certainly pleasing, and altogether there are perhaps few better specimens of purely German design in pointed architecture. The church of St. Blasius, in the same town, is far from being so good an example of the style.

616. St. Severus Church at Erfurth. From Puttrich, Denkmäler.

The cathedral at Erfurth is a highly ornamented building, but, though possessing beautiful details in parts, yet shows the slenderness of construction which is so frequent a fault in German Gothic buildings. The church of St. Severus in the same town resembles that at Muhlhausen, but possesses so characteristic a group of three spires[1] over what we would consider the transept — or just in front of the apse — that it is illustrated (woodcut No. 616). It certainly looks like a direct lineal descendant from the old Roman basilican apse grown into Gothic tallness. Though common in Germany, placed either here or at the west front, I do not know

[1] The façade designed for the cathedral at Louvain (mentioned at page 725) was identical with this group of spires in arrangement, though on a much larger scale, and infinitely richer in ornament.

of any single example of such an arrangement either in France or England.

To the same class of square churches with slightly projecting chancels belongs the Frauen Kirche at Nuremberg, one of the most ornate of its kind, and possessing also in its triangularly formed porch another peculiarity found only in Germany. The principal entrances to the cathedrals of Ratisbon and Erfurth are of this description—the latter being the richest and boldest porch of the kind.

One of the best known examples of the daring degree of attenuation to which the Germans delighted to carry their works is the choir (woodcut No. 433) added in 1353 and 1413 to the old circular church of Charlemagne at Aix-la-Chapelle. As we now see it, the effect is certainly unpleasing; but if these tall windows were filled with painted glass, and the walls and vault coloured also, the effect would be widely different. Perhaps it might then be even called beautiful; but with scarcely a single exception all those churches are now deprived of this most indispensable part of their architecture, and, instead of being the principal part of the design, the windows are now only long slits in the masonry, giving an appearance of weakness without adding to the beauty or richness of the ornament.

The same remarks apply to the Nicholai Kirche at Zerbst, and the Petri Kirche at Gorlitz, both splendid late specimens of this exaggerated class of German art. By colour they might be restored, but as seen now in the full glare of the cold daylight they want almost every requisite of true art, and neither their size nor their constructive skill suffices to redeem them from the reproach.

SPIRES.

Except the open-work spires above described, and the others mentioned in the preceding pages, those of Germany are not, as a general rule, remarkable either for their beauty or their elevation. There is one at Landshut, however, that is an exception to this remark, being 425 ft. in height, principally constructed of brick, of very graceful outline, though composed of too many parts and divided into too many stories to possess all the requisites of a good spire. That attached to the cathedral at Frankfort has also been much admired, but though some of its details are certainly good, it by no means merits the praise that has been bestowed upon it.

CHAPTER II.

CONTENTS.

Circular Churches — Church Furniture — Civil Architecture.

Circular Churches.

In adopting the pointed style, the Germans almost wholly abandoned their old favourite circular form; the Liebfrauen church at Trèves, quoted above, p. 570, being almost the only really important example of a church in this style approaching to a rotunda. Chapter-houses are as rare in Germany as in France, and those that are found are not generally circular in either country. There is a baptistery attached to the cathedral at Meissen, and one or two other insignificant examples elsewhere; but the most pleasing object of this class is the Anna chapel, attached to the principal church at Heiligenstadt. It is said that it always was dedicated to the sainted mother of the Virgin, but it would require more than tradition to prove that it was not originally designed as a baptistery or a tomb-house. Be this as it may, it is one of the most pleasing specimens of its class anywhere to be found, and so elegant as to make us regret the rarity of such structures.

617. Anna Chapel at Heiligenstadt. From Puttrich, Denkmäler.

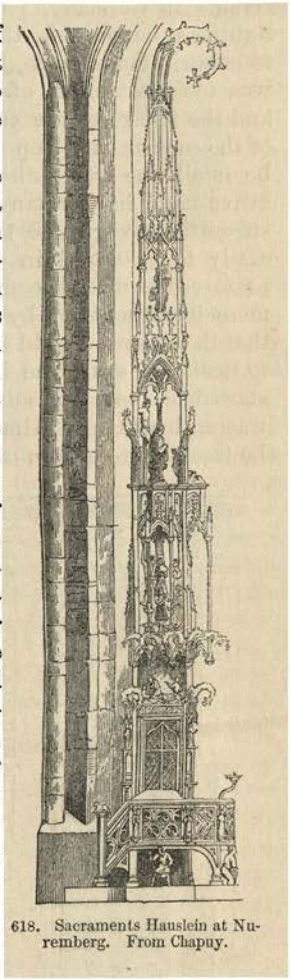
Church Furniture.

The churches of Germany are not generally rich in architectural furniture. Few rood-lofts are found spanning from pillar to pillar of the choir like that at the Madelaine of Troyes (woodcut No. 584); and though some of the screens that separate the choirs of the churches are rich, they are seldom of good design. The two at Naumberg are perhaps as good as any of their class in Germany. Generally they

were used as the *lectorium*—virtually the pulpit—of the churches. In most instances, however, the detached pulpit in the nave was substituted for these, and there are numerous examples of richly-carved pulpits, but none of beautiful design. Generally they are overloaded with ornament, and many of them disfigured with quirks and quibbles, and all the vagaries of later German art.

The fonts are seldom good or deserving of attention, and the original altars have almost all been removed, either from having fallen to decay, or to make way for some more favourite arrangement of modern times.

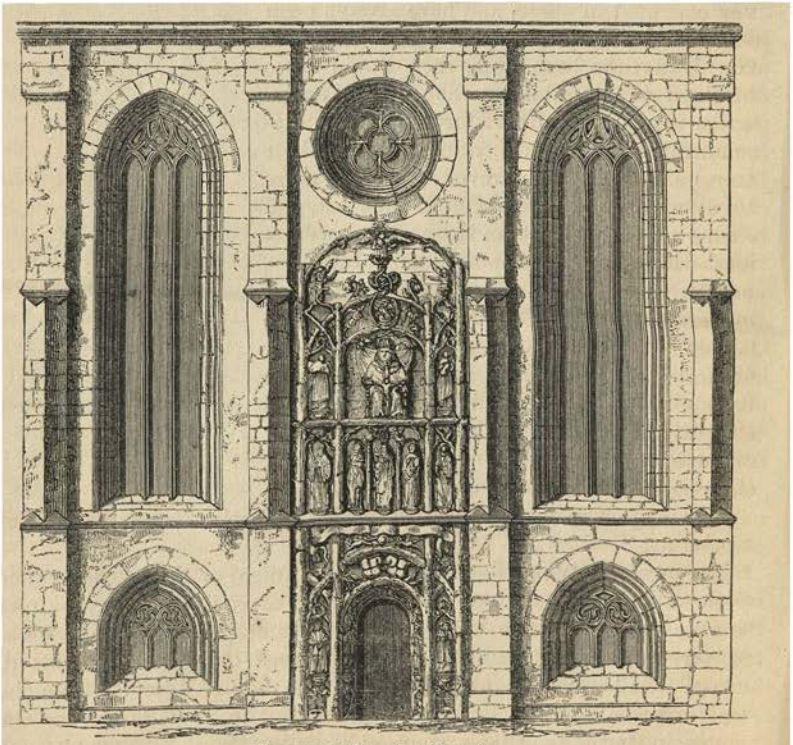
The "Sacraments Hauslein" (the receptacle for the sacred elements of the communion) is a peculiar article of furniture frequently found in German churches, and in some of those of Belgium, though very rare in France and unknown in England, but on which the German artists seem to have lavished more pains than on almost any other article of church decoration. Those in St. Lawrence's church at Nuremberg and at Ulm are perhaps the most extraordinary pieces of elaborate architecture ever executed in stone, and have always been looked on by the Germans as chefs-d'œuvre of art. Had they been able, they would have delighted in introducing the same extravagances into external art: fortunately the elements forced them to confine them to their interiors. Nothing, however, can show more clearly what was the tendency of their art, and to what they aspired, than these singular erections, which, notwithstanding their absurdity, considering their materials, must excite our wonder, like the concentric balls of the Chinese. To some extent also they claim our admiration for the lightness and the elegance of their structure. Simplicity is not the characteristic of the German mind. A difficulty conquered is what it glories in, and patient toil is not a means only, but an end, and its expression often excites in Germany more admiration than either loftier or purer art.



618. Sacraments Hauslein at Nuremberg. From Chapuy.

It can scarcely be doubted but that much of the extravagance which we find in later German architecture arose from the reaction of the glass-painters on the builders. When first painted glass was extensively introduced, the figures were grouped or separated by architectural details, such as niches or canopies, copied literally from the stone ornaments of the building itself. Before long, however, the painter, in Germany at least, spurned at being tied down to copy such

mechanical and constructive exigencies; he attenuated his columns, bent and twisted his pinnacles, drew out his canopies, and soon invented for himself an architecture bearing the same relation to the stone Gothic around him that the architecture shown on the paintings of Pompeii bears to the temples and buildings from which it is derived. In Germany, painters and builders alike were striving after lightness, but in this the painter was enabled by his material easily to outstrip the mason. The essentially stone character of architecture was soon lost sight of. With the painter the finials, the crockets, and the foliage of the capitals again became copies of leaves instead of the conventional representations of nature which they are and must be in all true art. Like Sir James Hall in modern times, the speculative mind in Germany was not long, when advanced thus far, in suggesting a vegetable theory for the whole art. All these steps are easily to be traced in the sequence of German painted glass still preserved to us. The more extravagant and intricate the design, the more it was admired by the Germans. It was therefore only natural that the masons should strive after the same standard, and should try to realise in stone the ideas which the painters had so successfully started on the plain surface of the glass. The difficulty of the task was an incentive. Almost all the absurdities of the later styles may be traced more or less to this source, and were it worth while, or were



619. Doorway of Church at Chemnitz.

this the place, it would be easy to trace the gradual decay of true art from this cause. One example must suffice, taken from a church at Chemnitz (woodcut No. 619), where what was usual, perhaps admissible, in glass, is represented on stone as literally as is conceivable. When art came to this, its revival was impossible among a people with whom such absurdities could be admired, as their frequency proves them to have been. What a fall does all this show in that people who invented the old Round-Gothic style of the Rhenish and Lombard churches, which still excite our admiration as much from the simple majesty of their details as from the imposing grandeur of the mass!

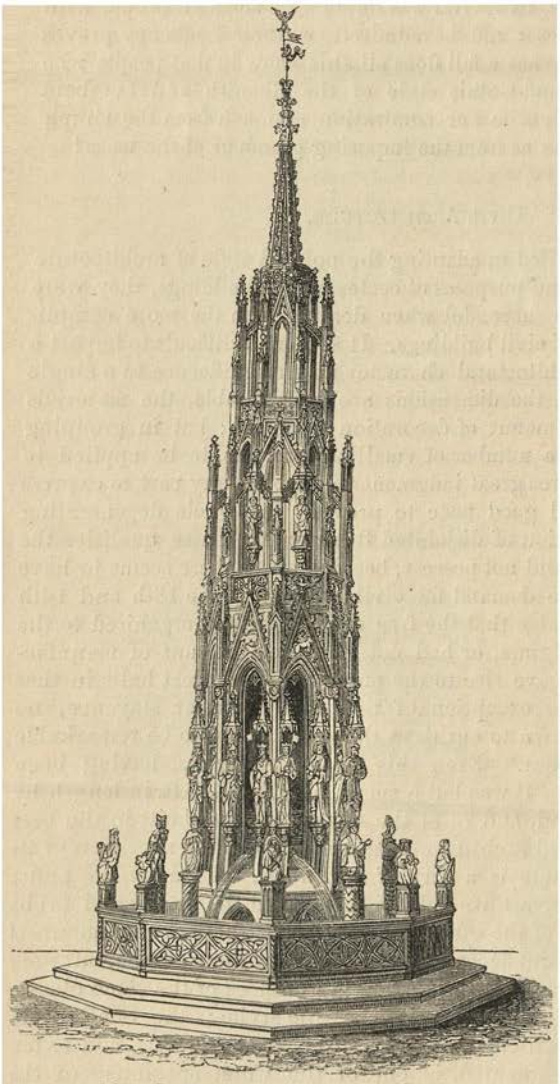
CIVIL ARCHITECTURE.

If the Germans failed in adapting the pointed style of architecture to the simple forms and purposes of ecclesiastical buildings, they were still less likely to be successful when dealing with the more complicated arrangements of civil buildings. It seldom is difficult to impart a certain amount of architectural character and magnificence to a single hall, especially when the dimensions are considerable, the materials good, and a certain amount of decoration admitted; but in grouping together as a whole a number of small apartments, to be applied to various uses, it requires great judgment to enable every part to express its own purpose, and good taste to prevent the whole degenerating merely into a collection of disjointed fragments. These qualities the Germans of that age did not possess, besides which there seems to have been singularly little demand for civil edifices in the 13th and 14th centuries. It is probable that the free cities were not organised to the same extent as in Belgium, or had not the same amount of manufacturing industry that gave rise to the erection of the great halls in that country, for with the exception of the Kauf Haus at Mayence, no example has come down to our days that can be said to be remarkable for architectural design. Even this no longer exists, having been pulled down in 1812. It was but a small building, 135 ft. in length by 92 in width at one end, and 75 at the other. It was built in the best time of German pointed architecture, and was a pleasing specimen of its class. At Cologne there is a sort of Guildhall, the Gurzenich, and a tower-like fragment of a town-hall, both built in the best age of architecture; and in some of the other Rhenish towns there are fragments of art more or less beautiful according to the age of their details, but none that will bear comparison with the Belgian edifices of the same class.

The only really important palace of this style is the Schloss Marienburg in Prussia, which, though of the best age (1309), and extensively and richly ornamented, is one of the worst specimens of this class of buildings, and as bad a piece of architecture as Germany possesses. Some of the castles in which the feudal aristocracy of the day resided are certainly fine and picturesque buildings, but seldom remarkable for architectural beauty either of design or detail. The same remarks apply to the domestic residences. Many of the old high gabled houses in the streets are most elaborately ornamented, and pro-

duce picturesque combinations in themselves and with one another; but as works of art few have any claim to notice, and neither in form nor detail are they worthy of admiration.

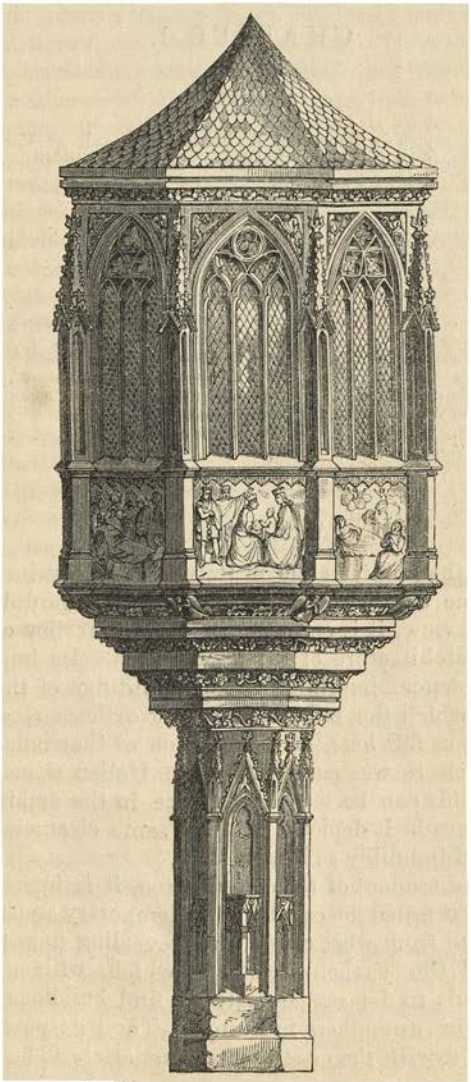
Among more miscellaneous monuments may be named the weigh tower at Andernach, with its immense crane, showing how any object may be made architectural if designed with taste. The Schöne Brunnen, or "Beautiful Fountains," in the market-place at Nuremberg, is one of the most unexceptionable pieces of German design in existence. It much resembles the contemporary crosses erected by our Edward I. to the memory of his beloved queen Eleanor, but it is larger and taller, the sculpture better, and better disposed, and the whole design perhaps unrivalled among monuments of its class. The lightness of the upper part and the breadth of the basin at its base give an appearance of stability which greatly contributes to its effect.



620. Schöne Brunnen at Nuremberg. From Chapuy.

In the same town of Nuremberg are several houses presenting very elegant specimens of art in their details, though few that now at least afford examples of complete designs worthy of attention. The two parsonages or residences attached to the churches of St. Sebald and St. Laurence are among the best. The bay window (woodcut No. 621) from the façade of the former is as pleasing a feature as is to be found of its class in any part of Germany.

In all countries the specimens of domestic art are, from obvious causes, more liable to alteration and destruction than works of a more monumental class. Making every allowance for this, still Germany seems more deficient than the neighbouring countries in domestic architecture in the pointed style, and one can hardly avoid the conviction that this form was never thoroughly adopted by the people of this country, and it consequently never had much hold on their feelings or taste, and died out early, leaving only some wonderful specimens of masonic skill in the more monumental buildings, but very few evidences of true art or of sound knowledge of the true principles of architectural effect.



621. Bay Window from St. Sebald, Nuremberg.

BOOK VI.

ITALY.

CHAPTER I.

CONTENTS.

Amalgamation of styles — Geographical limits — Church at Vercelli — Asti — Padua — Cathedral of Sienna — Florence — Domes — St. Petronio, Bologna — Milan Cathedral — Duomo at Ferrara.

CHRONOLOGY.

	DATES.		DATES.
Bologna independent	A.D. 1112	Martino delle Torre at Milan	A.D. 1260
Countess Matilda at Florence	1115	Visconti Lord of Milan	1277
Ziani elected Doge of Venice	1173	Taddeo de Pepoli at Bologna	1334
Obizzo d'Este at Ferrara	1184	Conspiracy of Marino Faliero	1355
Enrico Dandolo takes Constantinople	1203	Gian Galeazzo Visconti Duke of Milan	1395
War between Genoa and Venice	1205	Verona ceded to Venice	1409
Azzo d'Este at Ferrara	1208	Cosmo de' Medici	1434
Martino della Scala at Verona	1259		

Pointed Architecture in Italy.

The history of the pointed style in Italy is even less instructive than that of the same art in Germany. Indeed, if regarded only in an artistic point of view, it is perhaps the least interesting chapter in the history of the architecture of the middle ages. Its importance consists in the evidence, imprinted on the buildings of the country, of the extent to which the influence of the Northern races with their feudal system was felt here, of the duration of that influence, and the degree in which it was modified by the Italian element which lay beneath. All this can be read at a glance in the architecture of the age, and nowhere is it depicted with the same clearness and fixed so unalterably and indelibly as it is in Italy.

To the mere student of architecture, too, it is interesting to trace at what points it failed to equal the contemporary styles on this side of the Alps, and from what causes, thus revealing to us the secrets of the success of the French architects, which, without this test, it might be difficult to detect. In Italy we find buildings scarcely surpassed in size by any others in Europe. The best possible construction is combined with the most beautiful material. The vaulted roofs

are of the most daring construction, supported by coupled piers; and the pointed arch, on which so much stress is usually laid, is used currently in every part; and yet with all this, these buildings are only cold, unmeaning, inartistic productions, with all the defects and hardly one of the beauties of the true pointed Gothic edifices. This being so, it cannot be difficult to find out to what the one style owes its perfection, and what was the cause of want of success in the other.

One great cause of this seems to lie deep in the character of the people. It is to be observed that, however excellent in other departments of art, no Italians were ever great architects. The Etruscans, as we have seen, were not extensive builders, though what they did they seem to have done well. The Romans borrowed a style from the Greeks, which they never understood, and which they misused, misapplied, and spoilt. The Lombards were Germanic foreigners in the land, and great and original as builders only so long as they retained their nationality. No sooner did their distinct character die out and the indigenous race resume its sway, than their architecture decayed; they adopted the then fashionable style of France and Germany, but adopted it late, without comprehending its principles. Dissatisfied with their own productions, the Italians quickly abandoned it, and returned to the old classical style. This last change seems to have been made far more from associations with the name of Rome, which alone rendered them and their peninsula illustrious, than from any distinct perception either of the beauty of the style itself or of its fitness for their purposes. Unfortunately for Europe, the revival of classical literature at the same time led the Northern nations to follow in the same vicious path, and to cover the land with all the absurdities of the revived classical school.

Among the material causes that aided this natural disposition or defect in the minds of the people, one of the principal was their dislike to, or inaptitude for appreciating the beauties of stained glass.

In a previous chapter it has been attempted to explain how all-important this was to the elaboration of the Gothic style. But for its introduction, the architecture of France would bear no resemblance to what we there find. In Italy, though the people loved polychromy, it was always of the opaque class. They delighted to cover the walls of their churches with frescoes or mosaics, to enrich their floors with the most gorgeous pavements, and to scatter golden stars on a blue ground over their vaults; but rarely, if ever, did they fill, or design to fill, their windows with painted glass. Perhaps the glare of an Italian sun may have tended to render its brilliancy intolerable. More probably the absence of stained glass in Italy is owing to its incompatibility with fresco-painting, the effect of which would be entirely destroyed by the superior brightness of the transparent material. The Italians were not prepared to relinquish the old and favourite mode of decoration in which they excelled. This adherence to the old method of ornamenting churches enabled them, in the 15th and 16th centuries,

to surpass all the world in the art of painting, but was fatal to the proper appreciation of the pointed style, and to its successful introduction into the land.

The first effect of this was that the windows in Italian churches were all small, and devoid of tracery with all its beautiful accompaniments. The walls, too, were consequently solid, and quite sufficient, by their own weight, to abut the thrust of the arches: so that neither projecting or flying buttresses nor pinnacles were needed. The buildings were thus deprived externally of all the aspiring vertical lines so characteristic of the true Gothic. The architects, to relieve the monotony arising from the want of these features, were forced to recur to the horizontal cornices of the classical times, and to cover their walls with a series of pannelling, which, however beautiful in itself, is both unmeaning and inconsistent.

Internally, too, having no clerestory to make room for, and no constructive necessities to provide for, they jumped to the conclusion that the best design is that which covers the greatest space with the least expenditure of materials, and with the least encumbrance of the floor. With builders this is the golden rule, but with architects it is about the worst that can possibly be adopted. The Germans were not free from this fault, but the Italians carried it still further. If on four or five piers they could support the vault of a whole nave, they never dreamed of introducing more. A French architect in the same space, though probably superior in constructive skill, would have introduced eight or ten. An Italian would carry the vaults of the side aisles to the same height as that of the nave, if he could. A Northern architect knew how to keep the two in due proportion to one another, whereby he obtained greater height and greater width in the same bulk, and an appearance of height and width greater still, by the contrast between the parts. He gave to the building, moreover, a character of strength and stability perhaps even more valuable than that of size.

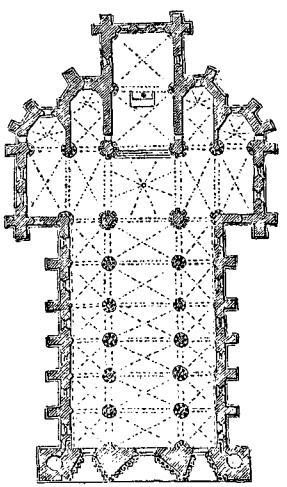
In the same manner the Northern architects, while they grouped shafts together, kept them perfectly distinct, so as to allow every one to bear its proportional part of the load, and perform its allotted task. The Italians never comprehended this principle, but merely stuck pilasters back to back, in imitation of the true architects, producing an unmeaning and ugly pier. The same incongruity occurs in every part and in every detail. It is a style copied without understanding, and executed without feeling. The beauty of the sculptured foliage and the elegance of the details sometimes go far to redeem these faults. The Italians, though bad architects, were always beautiful carvers, and as a Southern people, were free from the vulgarities sometimes apparent farther North. They never fell into the wild barbarisms that sometimes disfigure even the best buildings on this side of the Alps. When painting is joined to sculpture, the architecture may escape censure, owing to the subordinate position it then occupies. Unfortunately there are only two churches of any importance in this style that retain all their painted decorations—the church at Assisi, and the Certosa near Pavia. From this circumstance they are perhaps the most admired

in Italy. In others the plain blank spaces left for colour are still plain and void. We see the work of the architect unaided by the painting which was intended to set it off, and we cannot but condemn it as displaying at once bad taste and ignorance of the true Gothic style.

The geographical limits of the Italian Gothic style are easily defined, but before doing so it is necessary to state that there are in Italy two totally distinct classes of pointed architecture. The first, introduced from Sicily, a direct descendant of the Saracenic and Byzantine styles, and wholly unconnected with either the French or German. This arose in the 11th century, and will form the theme of the next chapter. It perished almost entirely about the time that the other penetrated across the Alps.

The Northern style, imported in the beginning of the 13th century, exactly corresponded with the limits attained by the German race to which it belongs. Wherever they settled in sufficient numbers to influence the population, there it is found; and in the exact ratio in which German blood is known to exist in a particular locality, does the pointed style prevail. It is thus found all over Lombardy and the valley of the Po. It extends down the centre of Italy to Sienna and Orvieto. It prevailed at one time at Florence and in Bologna; but nowhere, except in Venice and Genoa, extended to the coasts. The shores of Italy were so thickly peopled before the arrival of the barbarians that those districts were never permanently affected by them. In Rome the Gothic style is found timidly displaying itself in one church—the Sta. Maria sopra Minerva—of the 16th century, but it took no root in so Italian a city. It probably, however, exists at Benevento, and may also be found in some of the smaller towns; but to the north of Pavia only did it attain considerable prominence.

One of the earliest, or perhaps the very first Italian edifice into which the pointed arch was introduced, is the fine church of St. Andrea at Vercelli, commenced in the year 1219 by the Cardinal Guala Bicchieri, and finished in three years. This prelate, having been long legate in England, brought back with him an English architect called, it is said, Brigwithe, and entrusted him with the erection of this church in his native place.

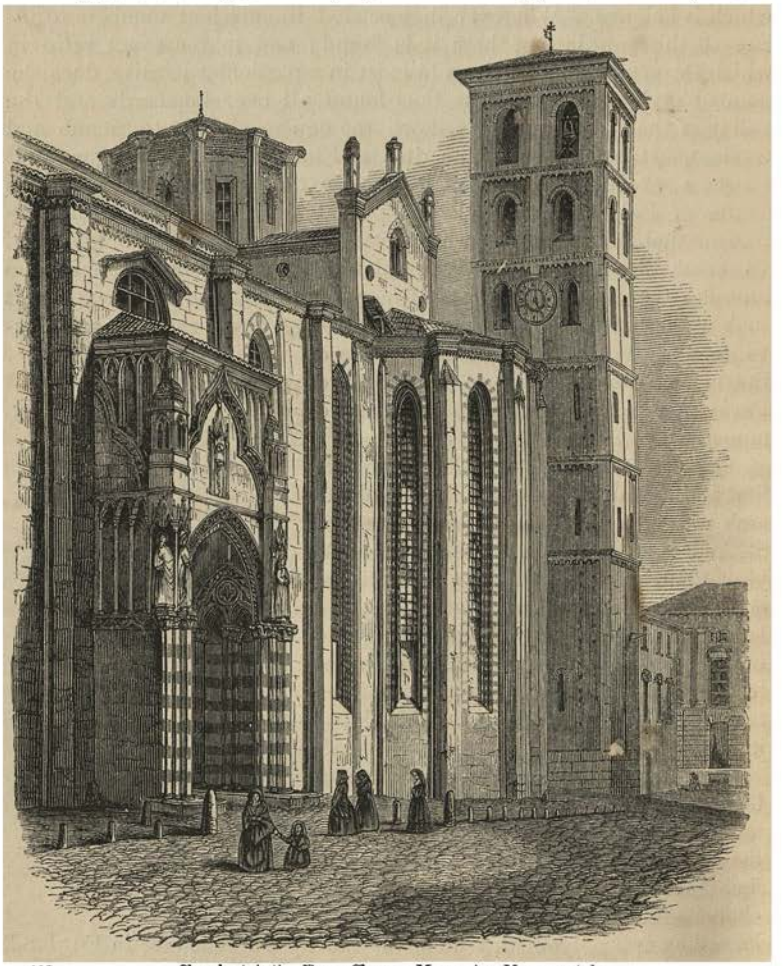


622. Plan of the Church at Vercelli. From Osten's Baukunst in Lombardei. Scale 100 ft. to 1 in.

In plan, this church is certainly very like an English one, terminating squarely towards the east, and with side chaplets to the transepts, arranged very much as we find them at Buildwas, Kirkstall, and other churches of this class and size, only that here they are polygonal, which was hardly ever the case in England. But with this English plan all influences of the English architect seem

to have ceased, the rest being built in purely Italian style. Externally, the pointed arch nowhere appears, all the doors and windows being circular-headed; and internally it is confined to the pier-arches of the nave and the vaulting of the roof. The façade is flanked by two tall, slender, square towers at the angles; and the intersection of the nave and transept is covered by one of those elegant octagonal domes which the Italians knew so well how to use, and which is in fact the one original and good feature in their designs. The external form of this church is interesting, as being the prototype which was so greatly expanded two centuries afterwards by a German architect in the design of Milan cathedral.

A few years after this, in 1229, a church was commenced at Asti, and the tower finished in 1266. This allowed time for a more complete development of the pointed style, which here appears not only inter-



623. Church at Asti. From Chapuy, Moyen Age Monumental.

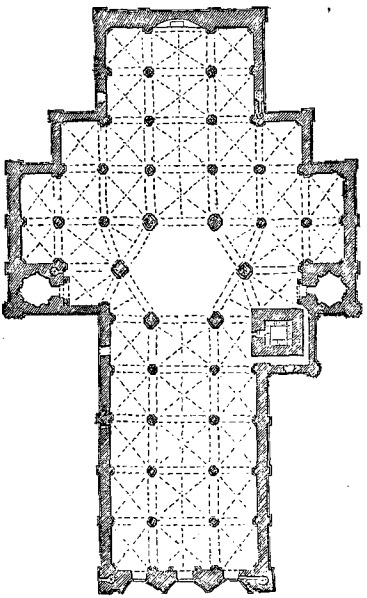
nally, but externally. Tall lancet windows appear in the flanks, and even the doorways assume this form in their canopies at least, if not in their openings. The porch shown in the view (woodcut No. 623) is a later addition, and a characteristic specimen of the style during the 14th century. This church is also one of the earliest examples in which those elegant terra-cotta cornices of little intersecting arches seem to have been brought to perfection.

The most remarkable church of this age is that of St. Francis at Assisi, commenced A.D. 1228, and finished, in all essentials at least, A.D. 1253. It is said to have been built by a German named Jacob, or Jacopo. Certainly no French or English architect would have designed a double church of this class, and no Italian could have drawn details so purely Northern in character as those of the upper church. In the lower church there are hardly any mouldings that mark the style, but still its character is certainly rather German than Italian. This church depends on its painting much more than on its architecture for its magnificence and character. In the first place it is small, the upper church being only 225 ft. long, by 36 in width; and though the lower one has side aisles which extend the width to 100 ft., the upper church is only 60 ft. in height, and the lower about half as high, so that it is far too small for much architectural magnificence. None of its details are equal to those of contemporary churches on this side of the Alps. The whole church is covered with fresco-paintings in great variety and of the most beautiful character, which render this church one of the most celebrated and admired of all Italy. Without its frescoes, and if found on this side of the Alps, it would hardly attract any attention. It is invaluable as an example showing to what extent polychromatic decoration may be profitably carried, and how it should be done; and also as an illustration of the extent to which the Italians allowed foreigners to introduce their style and mode of ornamentation into the country.

If from these we turn to the church of St. Antonio, Padua (1231–1307), we find the unsettled architectural ideas of the Italians assuming another form altogether. It is no longer a German or Englishman trying to engraft his own upon the old round-arched Lombard style, but an attempt to amalgamate those old forms with the Byzantine cupolas of the neighbouring city of Venice. A signal failure was the result, for an uglier church can hardly be found anywhere. Its Eastern domes, its German spires and narrow galleries of pointed arches, make up an aggregate that could exist nowhere else. We cannot regret that it found no imitators: on the contrary, the style in the valley of the Po seems to have settled down into what is generally known as Italian pointed Gothic, of which St. Anastasio at Verona (1307) may be taken as the type. This variety is not without some beauties of its own, but certainly inferior, both in originality of design and power of expression, to the round-arched style which it superseded, and immeasurably so in completeness and finish of arrangement and detail to the Northern style, which it was so vainly trying to imitate.

The cathedrals of Sienna and Orvieto (the former commenced in

1243, the latter in 1290) are perhaps, taken altogether, the most successful specimens of Italian pointed Gothic. They are those at least in which the system is carried to the greatest extent without either foreign aid or the application of distinctly foreign details. These two buildings, moreover, both retain their original façades as completed by the first architects, while the three great churches of this style—the cathedrals of Florence, Bologna, and Milan—were all left unfinished, as well as many others of the smaller churches of Italy. That at Sienna illustrates forcibly the tendency exhibited by the Italian architects to adhere to the domical forms of the old Etruscans, which the Romans amplified to such an extent, and the Byzantines made peculiarly their own. It is much to be regretted that the Italians only, of all the Western mediæval builders, showed any predilection for this form of roof. On this side of the Alps it would have been made the most beautiful of architectural forms.



624. Plan of Cathedral at Sienna. From the Eglises Principales d'Europe. Scale 100 ft. to 1 in.

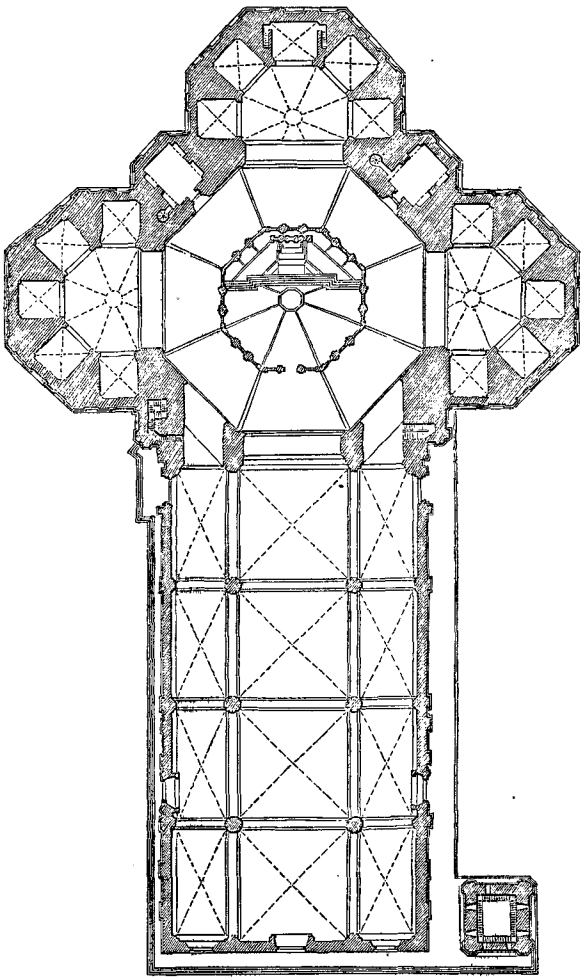
In Italy there is no instance of more than moderate success—nothing, indeed, to encourage imitation. Even the instance now before us is no exception to these remarks, though one of the boldest efforts of Italian architects. In plan it ought to have been an octagon, but that apparently would have made it too large for their skill to execute, so they met the difficulty by adopting a hexagonal form, which, though producing a certain variety of perspective, fits awkwardly with the lines of columns, and twists the vaults to an unpleasant extent. Still a dome of moderate height, and 58 ft. in diameter, covering the centre of the church, and with sufficient space around it to give it dignity, is a noble and pleasing feature, the merit of which it is impossible to deny. Combined with the rich colouring and gorgeous furniture of the church, it makes up a whole of great beauty. The circular pier arches, however, and the black and white stripes by which the elevation is marked, detract considerably from the effect of the whole—at least in the eyes of strangers, though the Italians still consider this a beauty. The façade of this cathedral is represented (woodcut No. 625). It consists of three great portals, the arches of which are equal in size, though the doorway in the centre is larger than those at the sides. Above this is the invariable circular window of the Italian architects, and the whole is crowned by a steep triangular gable.

The carved architectural ornaments of this façade are rich and elaborate in the extreme, though figured sculpture is used to a much less extent than in Northern portals of the same age. It is also observable that the strong horizontal lines do not harmonise with the aspiring character of pointed architecture.

625. Façade of the Cathedral at Sienna.

The cathedral of Orvieto is smaller and simpler, and less rich in its decorations, than that at Sienna, with the exception of its façade, which is adorned with sculpture and painting. Indeed this three-gabled front may be considered the typical one for churches of this class. The façades intended to have been applied to the churches at Florence, Bologna, Milan, and elsewhere, were no doubt very similar to that re-

presented in woodcut No. 625. As a frontispiece, if elaborately sculptured and painted, it is not without considerable appropriateness and even beauty; but, as an architectural object, it is infinitely inferior to the double-towered façades of the Northern cathedrals, or even to those with only one great tower in the centre. It has besides the defect of not expressing what is behind it, the central gable being always higher than the roof, and the two others merely ornamental appendages. Indeed this, as well as the Italian Gothic buildings generally, depended on painting, sculpture, and carving for its effect, far more than on architectural design properly so called.

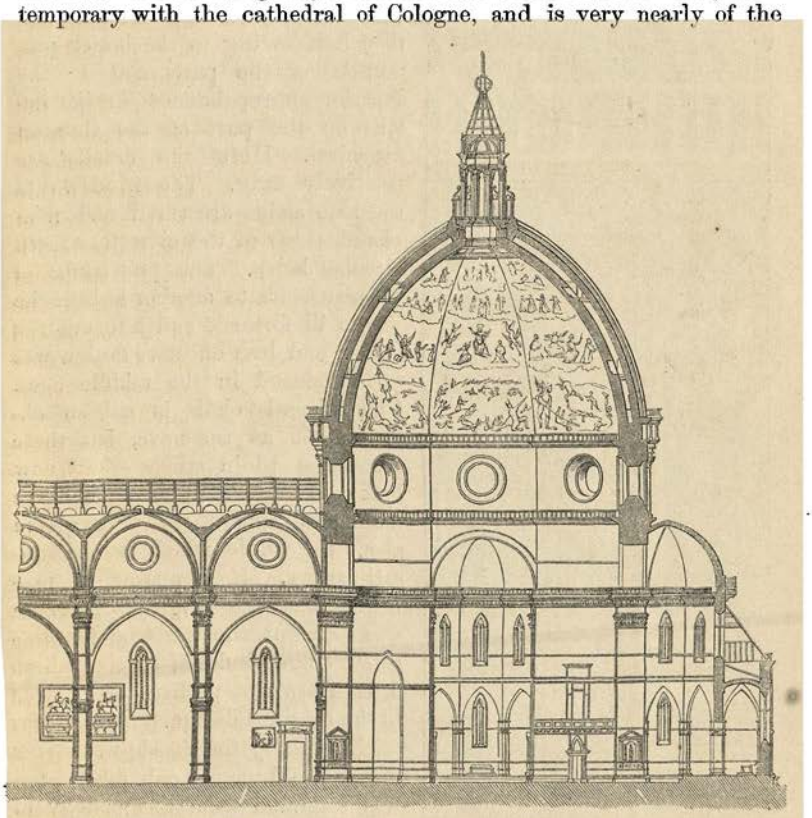


626. Plan of Cathedral at Florence. From Isabelle, Edifices Circulaires. Scale 100 ft. to 1 in.

By far the greatest and most perfect example of Italian Gothic is the church of Sta. Maria dei Fiori, the cathedral of Florence, one of the largest and finest churches produced in the middle ages—as far as mere grandeur of conception goes, perhaps the very best, though considerably marred in the execution.

The building of the church was commenced in the year 1294 or 1298 (it is not quite clear which), from the designs and under the superintendence of Arnolpho da Lapo, for unfortunately in this style we know the names of all the architects; and all the churches show traces of individual caprice, and the misdirected efforts of individuals, instead of the combined national movement which pro-

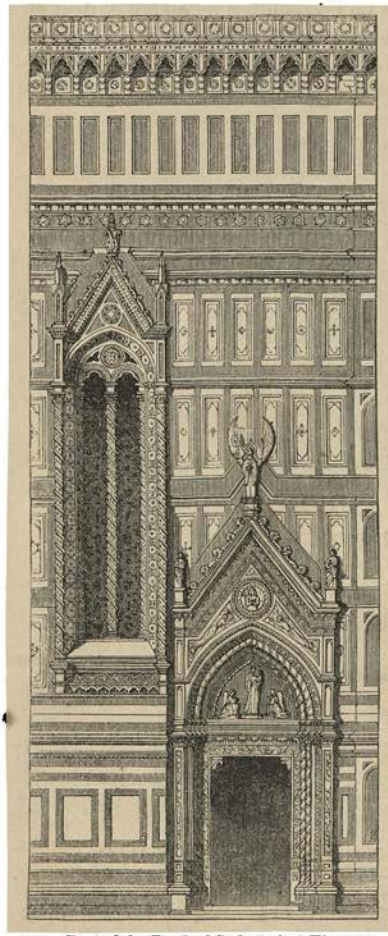
duced such splendid results in France and England. It is not quite clear how far Arnolpho carried the building, but probably as high as the springing of the vaults, at the time of his death in 1300. After this the works proceeded more leisurely, but the nave and smaller domes of the choir were probably completed as we now find them in the first 20 years of the 14th century. The great octagon remained uncovered till Brunelleschi commenced the present dome, A.D. 1420, and completed it in all essential parts before his death, which happened in 1444. The building may therefore be considered as essentially contemporary with the cathedral of Cologne, and is very nearly of the



627. Section of Dome and part of Nave of the Cathedral at Florence. Scale 100 ft. to 1 in.

same size, covering 84,802 ft. (Cologne 81,461), and, as far as mere conception of plan goes, there can be little doubt but that the Florentine cathedral far surpasses its German rival. Nothing indeed can be finer than the general plan of the Italian church. A vast nave leads to an enormous dome, extending into the triapsal arrangement so common in the early churches of Cologne, and which was repeated in the last and greatest effort of the middle ages, or rather the first of the new school—the great church of St. Peter at Rome. In the Florentine church all these parts are better subordinated and proportioned than

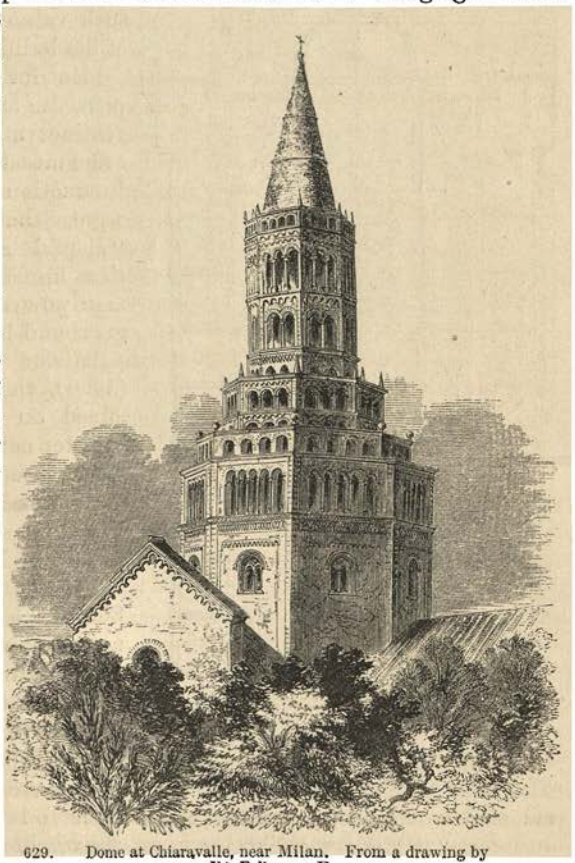
in any other example, and the mode in which the effect increases and the whole expands as we approach from the entrance to the sanctum is unrivalled. All this, alas! is utterly thrown away in the execution. Like all inexperienced architects, Arnolpho seems to have thought that greatness of parts would add to the greatness of the whole, and in consequence used only 4 great arches in the whole length of his nave, giving the central aisle a width of 55 ft. clear. The whole width is within 10 ft. of that of Cologne, and the height about the same; and yet, in appearance, the height is about half, and the breadth less than half, owing to the better proportion of the parts and to the superior appropriateness in the details on the part of the German cathedral. Here the details are positively ugly. The windows of the side aisles are small and misplaced, those of the clerestory mere circular holes. The proportion of the aisles one to another is bad, the vaults ill formed, and altogether a colder and less effective design was not produced in the middle ages. The triapsal choir is not so objectionable as the nave, but there are large plain spaces that now look cold and flat; the windows are too small, and there is a gloom about the whole which is very unsatisfactory. It is more than probable that the original intention was to paint the walls, and not to colour the windows, so that these defects are not perhaps chargeable to the original design.



623. Part of the Flank of Cathedral at Florence.

Externally the façade was never finished, and we can only fancy what was intended from the analogy of Sienna and Orvieto. The flanks of the nave are without buttresses or pinnacles, and with only a few insignificant windows would be painfully flat, except for a veneer of coloured marbles disposed in pannels over the whole surface. For an interior or a pavement such a mode of decoration is admissible; but it is so unconstructive, so evidently a mere decoration, that it gives a weakness to the whole, and a most unsatisfactory appearance to so large a building. This is much less apparent at the east end: the outline is here so broken, and the main lines of the construction so plainly

marked, that the mere filling in is comparatively unimportant. This part is the great beauty of the church, and as far as it was carried up according to the original design, is extremely beautiful. Even the plainness and flatness of the nave serve as a foil to set off the beauty of the choir. Above the line of the cornice of the side-aisles there is nothing, except the first division of the drum of the dome, which follows the lines of the clerestory, that can be said to belong to the original design. It has long been a question what Arnolpho originally intended, and how he meant to cover the great octagonal space he had prepared. All knowledge of his intentions seems to have been lost within a century after his death: at least in the accounts we have of the proceedings of the commission which resulted in the adoption of Brunelleschi's design for the dome, no reference is made to any original design as then existing, and no one seems to have known how Arnolpho intended to finish his work. Judging from the work so far as it was carried by him, with the knowledge which we now have of Italian architecture of that age, we can form a very probable conjecture of his design for its completion. It is likely that this consisted of, internally, a dome something like the present, but flatter, springing from the cornice 40 ft. lower than the present one, and pierced with openings on each face.

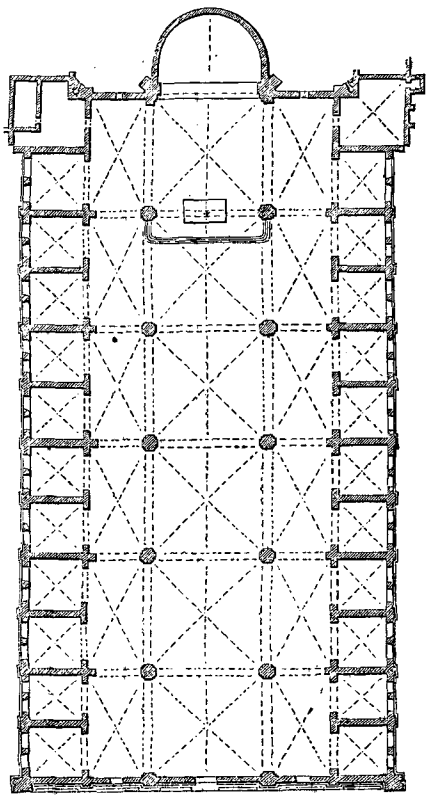


629. Dome at Chiaravalle, near Milan. From a drawing by Ed. Falkener, Esq.

Externally, it was probably to be arranged something like that of Chiaravalle, near Milan (woodcut No. 629), built in 1221, of course with different details, but in stories, so as to render the construction easy; and this would have been carried up to a height of not less than 500 ft., about equal to the length

of the church. The three semi-domes around the great dome must have been intended to be covered with miniature octagonal spires of the same class, and between these the vast substructures show that it was intended to carry up 4 great spires, probably to the height of 400 ft.

Had all this been done (and something very like it certainly was intended), neither Cologne Cathedral, nor any church in Europe, either ancient or modern, could be compared with this great and glorious apse. As it is, the plain, heavy, simple outlined dome of Brunelleschi acts like an extinguisher, and crushes the whole of the lower part of the composition, and both internally and externally destroys all harmony between the parts. It has deprived us of the only chance that ever existed of judging of the effect of a great Gothic dome; not indeed such a dome as might on the same dimensions have been executed on this side of the Alps, but still in the spirit, and with much of the poetry, which gives such value to the conceptions of the builders in those days.

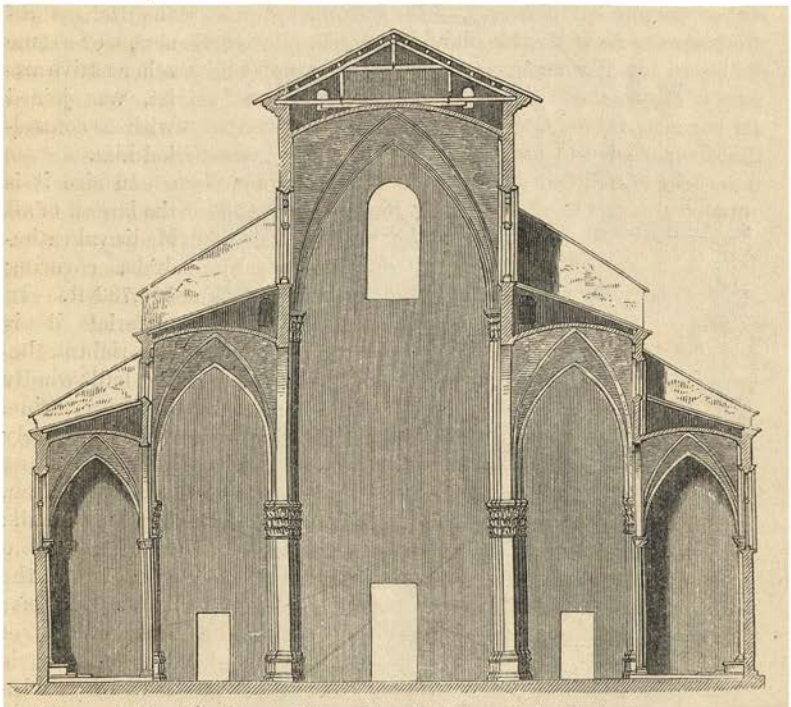


630. Plan of the part executed of St. Petronio, Bologna. From Wiebeking. Scale 100 ft. to 1 in.

But for this change in the plan, the ambition of the Florentines might have been in some measure satisfied, whose instructions to the architect were, that their cathedral "should surpass everything that human industry or human power had conceived of great and beautiful."

About a century later (1390), the Bolognese determined on the erection of a monster cathedral, that, in so far as size went, would have been more than double that at Florence. According to the plans that have come down to us, it was to have been about 800 ft. long and 525 wide across the transepts; at the intersection was to have been a dome 130 ft. in diameter, or only 6 ft. less than that at Florence; and the width of both nave and transepts was to have been 183 ft.: so that the whole would have covered about 212,000 ft., or nearly the same area as St. Peter's at Rome, and three times that of any French cathedral! Of this vast design, only about one-third, or 74,000 square ft., was ever executed; and it is fortunate that it stopped there, as no

uglier building was ever designed or executed. The plan and section of it (woodcuts Nos. 630 and 631) are not without interest, as illustrating the principles of Italian design, and useful for comparison either with such buildings as the beautiful cathedral at Bourges, which has aisles of different heights like this, or to illustrate the great cathedral of Milan, which comes next in our series.



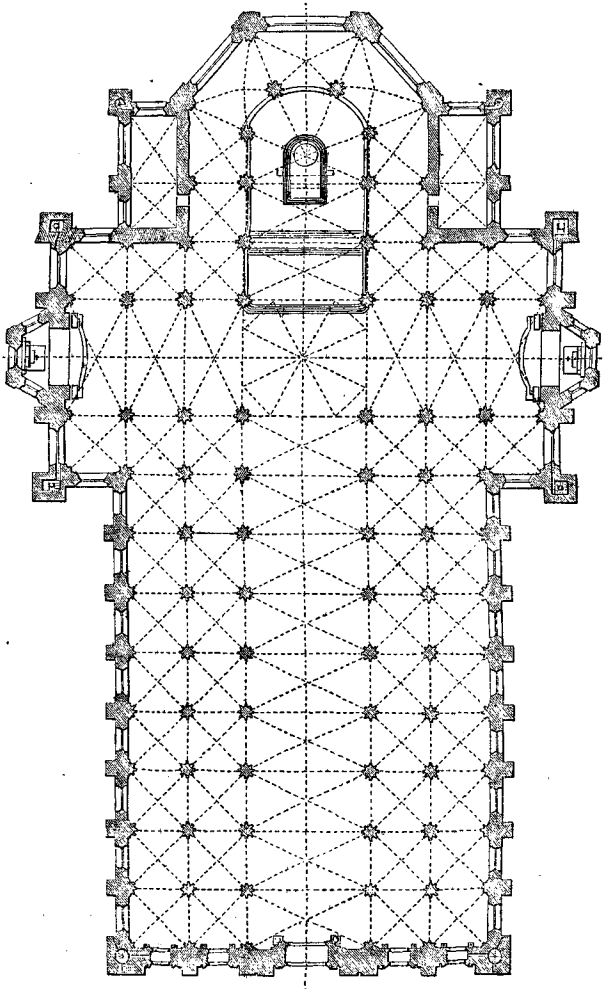
631. Section of St. Petronio, Bologna. From Wiebeking. Scale 50 ft. to 1 in.

As will be seen from the plan, the great object of the architect seems to have been to cover the greatest possible space from the fewest possible points of support, using his side chapels to get internal instead of external buttresses. In this design, the square of the vault of the central nave becomes the modulus, instead of that of the side-aisles as in all true Gothic buildings. Hence the nave is constructed with only six bays in length instead of twelve, and all the other parts are lean and wide in proportion.

The cathedral of Milan, which is certainly the most remarkable as well as the largest and richest of all the churches erected in the middle ages, was commenced in the year 1385, by order of John Galeazzo, first Duke of Milan, and consecrated in 1418, by which time all the essential parts seem to have been completed, though the central spire was not finished till about the year 1440 by Brunelleschi.

The design for this church is said to have been furnished by Henry Arlez of Gemunden, or as the Italians call him, de Gamodia, a German

architect; and it is certain that a foreigner must have been employed —the details and many of the forms are so essentially Northern; but it is equally certain that he was not allowed to control the whole, for all the great features of the church are as thoroughly Italian as the details are German: it is therefore by no means improbable that Marco de Campilione, as the Italians assert, or some other native artist, was joined with or controlled him.

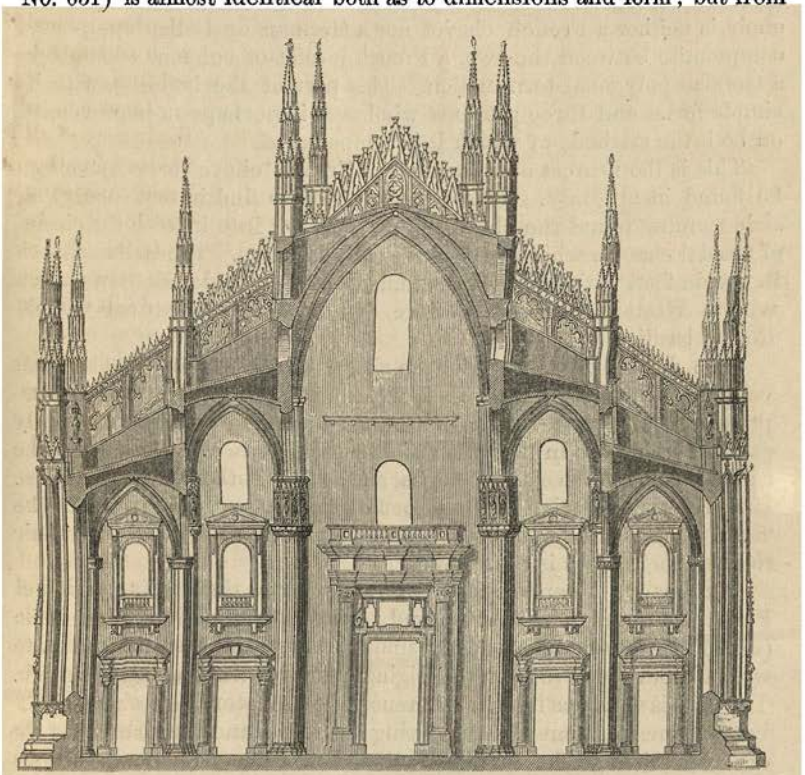


632. Plan of the Cathedral of Milan. From Chiesi Principali d'Europa. Scale 100 ft. to 1 in.

In size it is the largest of all Mediæval cathedrals, covering 107,782 ft. In material it is the richest, being built wholly of white marble, which is scarcely the case with any other church, large or small; and in decoration it is the most gorgeous: the whole of the exterior is covered with tracery, and the amount of carving and statuary lavished on its pinnacles and spires is unrivalled by any other building of Europe. It is also built wholly (with the exception of the façade) according to one design. Yet with all these advantages, the appearance of this wonderful building is not satisfactory to any one who is familiar with the great edifices on this side of the Alps. Cologne, if complete, would be more beautiful; Rheims, Chartres, Amiens, and Bourges leave a far more satisfactory impression on the mind; and even the little

church of St. Ouen will convey far more pleasure to the true artist than this gorgeous temple.

The cause of all this it is easy to understand, as all or nearly all its defects arise from the introduction of Italian features into a Gothic building; or rather, perhaps, it should be said, that all that was allowed the German architect was to ornament an Italian cathedral. Taking the contemporary cathedral of St. Petronio at Bologna as our standard of comparison, it will be seen that the section (woodcut No. 631) is almost identical both as to dimensions and form; but from



633. Section of Cathedral of Milan.[1] From Wiebeking. Scale 50 ft. to 1 in.

the plan, it will be perceived that the German system prevailed in doubling the number of piers between the central and side-aisles, and so far saved the church. The two small clerestories, however, still remain; and although the design avoids the mullionless little circles of Bologna, there is only space for little openings, which might rather be called attic than clerestory windows. The greater quantity of light being thus introduced by the tall windows of the

[1] The plan and section being taken from two different writers, there is a slight discrepancy between the scales. I believe the plan to be the more correct of the two, though I have no means of being quite certain regarding this.

outer aisle, the appearance is that of a building lighted from below, which is fatal to architectural effect.

The German architect seems to have designed great portals at each end of the transepts, as shown in the model still preserved on the spot. This was overruled, and three small polygonal apses substituted. Instead of the great octagonal dome which an Italian would have placed upon the intersection of the whole width of the nave and transepts, German influence has confined it to the central aisle, which is perhaps more to be regretted than any other mistake in the building. The choir is neither a French chevet nor a German or Italian apse, but a compromise between the two, a French circlet of columns enclosed in a German polygonal termination. This part of the building, with its simple forms and three glorious windows, is perhaps an improvement on both the methods of which it is compounded.

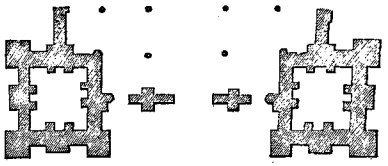
This is the nearest approach to the French chevet arrangement to be found in all Italy. It is extremely rare to find in that country an aisle running round the choir, but not opening into it, with the circlet of apsidal chapels which is so universal in France. The Italian church is not, in fact, derived from a combination of a circular Eastern church with a Western rectangular nave, but a direct copy from the old Roman basilica.

The details of the interior are almost wholly German. The great capitals of the pillars, with their niches and statues, are the only compromise between the ordinary German form and the great deep ugly capitals, fragments in fact of classical entablatures, which disfigure the cathedrals of Florence and Bologna, and so many other Italian churches. Had the ornamentation of these been carried up to the springing of the vault, they would have been unexceptionable; as it is, with all their richness their effect is unmeaning.

Externally, the appearance is very similar to that of Sta. Maria dei Fiori; the apse is rich, varied, and picturesque, and the central dome (excepting the details) exactly similar, though on a smaller scale, to what I believe to have been the original design of the Florentine church. The nave is nearly as flat as at Florence, the clerestory not being visible; but the forest of pinnacles and flying buttresses and the richness of the ornamentation go far to hide that defect. The façade was left unfinished, as in so many others of the great churches of Italy. Pellegrini was afterwards employed to finish it, and a model of his design is still preserved. This plan is such, that it is fortunate that it was not carried out. The façade was finished, as we now see it, from the designs of Amati, by order of Napoleon. It is common-place, as might be expected from its age, but inoffensive. The doorways are part of Pellegrini's design, and the mediæval forms being placed over those of the cinque-cento, produce a strangely incongruous effect. Several original designs for this west front are still preserved. One of these, with two small square towers at the angles, as at Vercelli and elsewhere, no doubt was the Italian design. The German one is preserved by Bassi,[1] of

[1] Dispareri d'Architectura.

which woodcut No. 634 is a tracing: had this been executed, the façade would have been about one-third, or 100 ft. wider than that of Cologne. If the height of the towers had been greater in the same proportion, they would have been the tallest in the world. In that case the effect would have been the same here as at Cologne, of shortening and overpowering the rest of the building to a painful extent. A medium design between these two, with spires rising to the same height as the central one, or about 360 ft., would perhaps have the happiest effect. It is certain that the want of some such features is greatly felt in the exterior of this building.



634. Design for Façade of Milan Cathedral. From Bassi.

The Certosa, near Pavia, was commenced at the same time as the cathedral at Milan (1396). It is remarkable in the middle ages to find two buildings, so close to one another in date and locality, so dissimilar as these are. There is no instance of such an occurrence on this side of the Alps, till modern times at least; and it shows that in those days the Italians were nearly as devoid of any distinct principles of architecture as we have since become.

The great difference here is that there is no trace of foreign influence in the building. It is as purely Italian as St. Petronio, and perhaps even worse in design—internally at least—which is saying a good deal. Nothing, however, can be more painful than the disproportion of the parts, the bad drawing of the details, the malformation of the vaults, and the meanness of the windows; but all these defects are so completely hidden by the most gorgeous colouring and furniture of such richness as almost to be unrivalled. So much more attractive are these two features to the majority of spectators, and so much more easily understood, that nine visitors out of ten are delighted with this church, and entirely overlook its miserable architecture in the richness and brilliancy of its decorations.

Externally the architecture is better than in the interior. From its proximity to Pavia, it retains its beautiful old galleries under the roof. Its circular apses, with their galleries, give to this church, for the age to which it belongs, a peculiar character, harmonizing well with the circular-headed form, which nearly all the windows and openings present. Even in the interior there are far more circular than pointed arches.

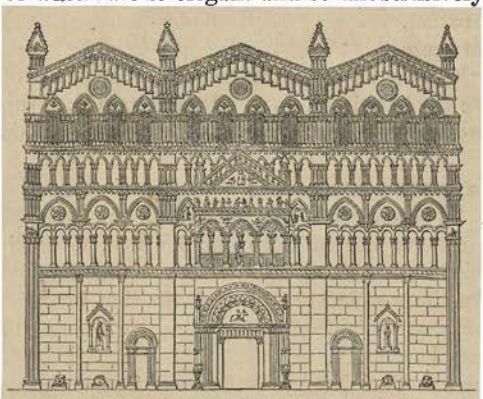
The most beautiful and wonderful part of the building is the façade. This was begun in 1473, and is one of the best specimens in Italy of the Renaissance style. It therefore does not come within the subject of the present chapter.

It would be a tedious and unprofitable task to attempt to particularize all the churches which were erected in this style in Italy, as hardly one of them possesses a single title to admiration beyond the very vulgar one of size. To this Santa Croce, at Florence, adds its

association with the great men that lie buried in its vaults, and Sta. Maria Novella can plead the exceptional circumstance in that city of possessing a façade; but neither of these has anything to redeem its innate ugliness in the eyes of an architect.

There are two great churches at Venice, the San Giovanni e Paulo (1246-1420), and the Frari (1250); but they are both entirely destitute of architectural merit.

A much more beautiful building is the Duomo at Como, the details of which are so elegant and so unobtrusively used as in great measure to make up for the bad design and awkward form of the whole. Its façade is perhaps inferior to that of the Duomo at Ferrara. Here we do not find the richness of the façades of Sienna or Orvieto, nor the elegance of the last named; but among the few that exist it stands pre-eminent for sober propriety of design, and the good proportions of all its parts. The repose caused by the solidity of the lower parts, and the gradual increase of ornament and lightness as we ascend, all combine to render it harmonious and pleasing. It is true it wants the aspiring character and bold relief of Northern façades; but these do not belong to the style, and it must suffice here if we meet with a moderate amount of variety, undisturbed with any very prominent instances of bad taste.

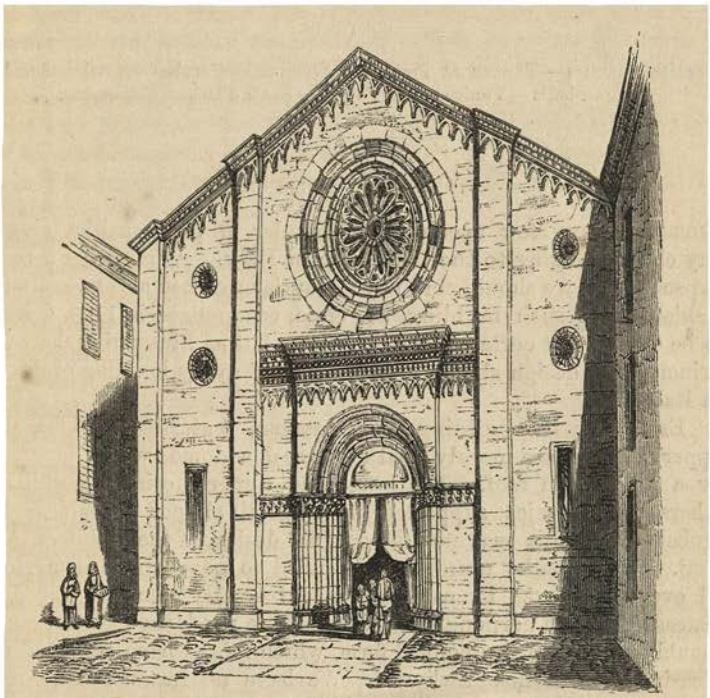


635. Duomo at Ferrara. From Hope's Architecture. Scale 50 ft. to 1 in.

The true type of an Italian façade is well illustrated in the view of St. Francesco, Brescia (woodcut No. 636), which may be considered the germ of all that followed. Whether the church had three aisles or five, the true Italian façade in the age of pointed architecture was always a modification or extension of this idea, though introduced with more or less Gothic feeling according to the circumstances in which it was placed.

At Florence there is a house or warehouse, converted into a church, Orsan San Michele (Horreum), which has attracted a good deal of attention, but more on account of its curious ornaments than for any beauty of design, which it does not, and indeed can hardly be expected to possess. The little chapel of Sta. Maria della Spina, at Pisa, owes its celebrity to the richness of its niches and canopies, and to the sculpture which they contain. In this the Italians were always at home, and probably always surpassed the Northern nations. It was far otherwise with architecture, properly so called. This, in the age of the pointed style, was in Italy so cold and unmeaning, that we do not wonder at the readiness there displayed to return to the classical

models. The Italians are to be forgiven in this, but we cannot so easily forgive *our* forefathers, who abandoned a far more beautiful style to copy one which they had themselves infinitely surpassed, and this only because the Italians, unable either to comprehend or imitate the true principles of pointed art, were forced to abandon its practice. Unfortunately for us, they had in this respect sufficient influence to set the fashion to all Europe.



636. View of St. Francesco, Brescia. From Street's Brick and Marble in the Middle Ages.

CHAPTER II.

CONTENTS.

Circular churches — Towers at Prato and Florence — Porches — Civil buildings — Town-halls —Venice — Doge's palace — Ca d'Oro — Conclusion.

Circular Buildings.

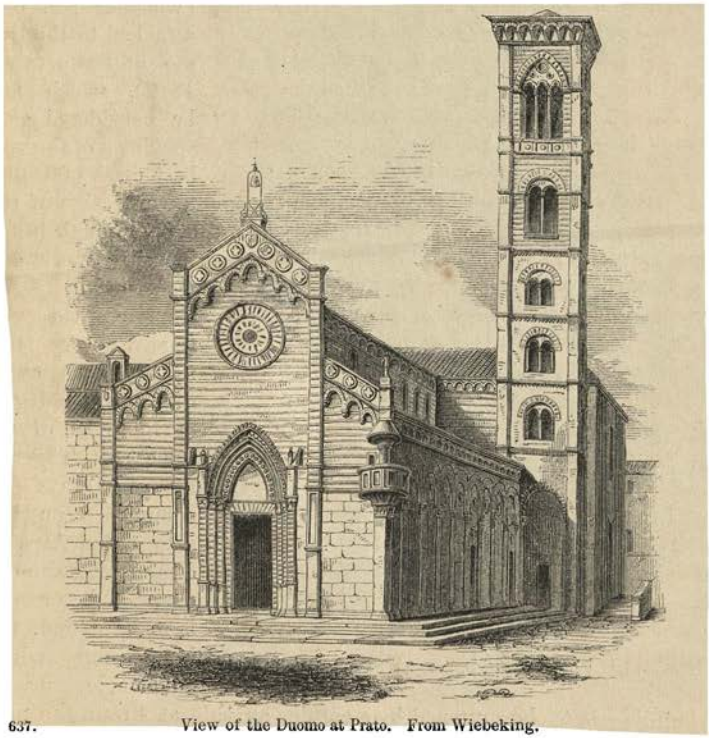
There are very few specimens of circular or polygonal buildings of any class belonging to the Gothic age in Italy. As churches it is not expected that we should find any. Baptisteries had also passed out of fashion. One such building, at Parma, commenced in 1196, deserves to be quoted, not certainly for its beauty, but as illustrating those false principles of design shown in every part of every building of this age in Italy.

Externally the building is an octagon, 6 stories in height, the 4 upper of which are merely used to conceal a dome, which is covered by a flat wooden roof. The lower and upper stories are solid, the others are galleries supported by little ill-shaped columns. It is probable that this was not the original design of the architect, Antelami. No doubt he must have intended to conceal the dome, or at all events to cover it, as this was universally done in Italy; but instead of a mere perpendicular wall as here used, the external outline should have assumed a conical form, which might have rendered it as pleasing as it is now awkward. We have no instance of a circular building carried out by Italian architects according to their own principles, so far as to enable us to judge what they were capable of in this style, unless perhaps it is the tombs of the Scaligers at Verona. These take the circular or polygonal form appropriate to tombs, but they are on so small a scale that they might rather be called crosses than mausolea; and though illustrating all the best principles of Italian design, and an exuberance of exquisite ornament, they can hardly be regarded as important objects of high art. It is from such as these, however, and from these only, that we may recover the principles of this art; for not being, as the Northern styles, a progressive national effort, but generally an individual exertion, if the architect died during the progress of a building, no one knew exactly how he had intended to finish it, and its completion was entrusted to the caprice and fancy of some other man, which he indulged, wholly regardless of its congruity with the work of his predecessor.

TOWERS.

The Italians in the age of pointed architecture were hardly more successful in their towers than in their other buildings, except that a tower, from its height, must always be a striking object, and, if accompanied by mass, cannot fail to have a certain imposing appearance, of which no clumsiness on the part of the architect can deprive it. Such towers as the Asinelli and Garisenda at Bologna possess no more architectural merit than the chimneys of our factories. Most of those subsequently erected were better than these, but still the Italians never caught the true idea of a spire.

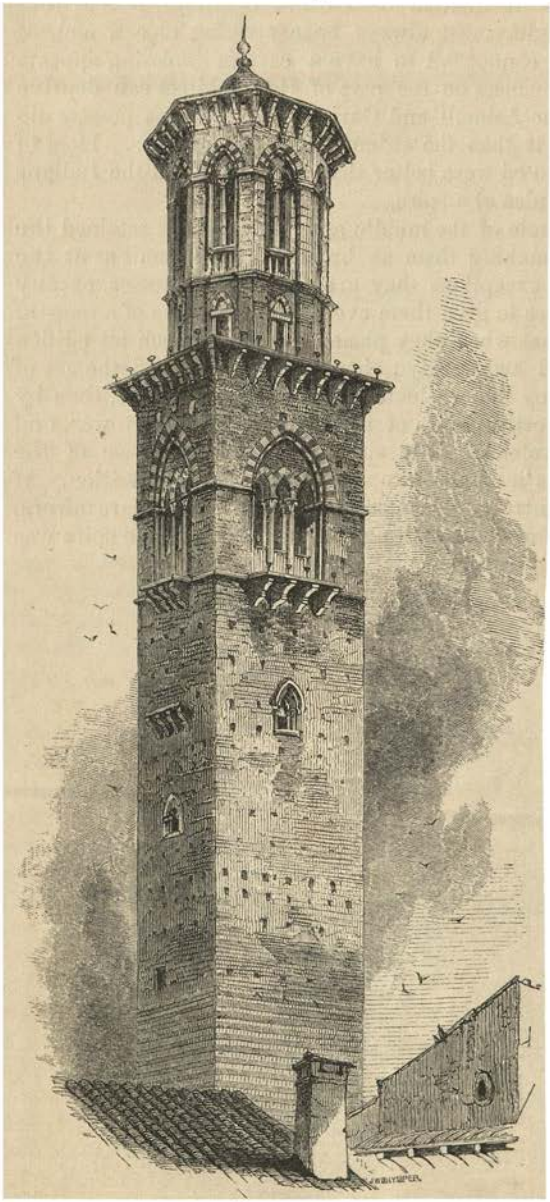
Throughout the whole of the middle ages the Italians retained the original square form, making them as broad at the summit as at the base. With very few exceptions they are without buttresses, or any projection on the angles to give them even an appearance of strength. The consequence is, that when they placed a spire on such an edifice as this, it always fitted awkwardly: they never understood the art of preparing for it, first by the graduated buttresses of the base, then by the strongly marked vertical lines of the upper part of the tower, and above all by the circlet of little spirelets round the base of the central spire that made it an absolute necessity of the composition. If the Italians, on the contrary, placed an octagon on their square towers, it seemed an accident for which nothing was prepared, and the spire was



637. View of the Duomo at Prato. From Wiebeking.

separated from it only by bold horizontal cornices instead of vertical lines, as true taste dictated.

In fact, the Italians seem to have benefited less by the experience or instruction of their Northern neighbours in tower-building than in any other feature of the style, and to have retained their old forms in these after they had abandoned them in other parts of their churches. The towers of Asti (1266) and Sienna (rebuilt in 1389) are illustrated in woodcuts Nos. 623 and 625. There certainly is little art in these. A more pleasing specimen is the tower (woodcut No. 637) attached to the Duomo at Prato (about 1312), which may be considered as a specimen of the very best class of Italian tower design of this age, although in fact its only merit consists in increasing the size of the openings in every story upwards, so as to give a certain degree of lightness to the upper part. This was almost always accomplished on this side of the Alps by diminishing the diameter. When a spire is to be added, that is the only admissible mode; but when the building is to be crowned by a cornice as this at Prato, the mode



638. Campanile, Palazzo Scaligeri, Verona. From Street's Work.

here shown is perhaps preferable.

The tower which is attached to the palace of the Scaligeri at Verona (woodcut No. 638) is perhaps as graceful as any other, and as characteristic of the Italian principles of tower-building. The lower part is absolutely plain and solid, the upper story of the square being pierced with one splendid three-light window in each face, above which is a boldly projecting cornice marking the roof. On this is placed an octagon two stories in height. If the lower had been broken by turrets or pinnacles at the angles, it would have added much to the effect. As it is, it seems only a makeshift to eke out the height of the whole; but the upper octagon with its boldly projecting cornice is in itself as graceful as anything of the kind in Italian architecture.

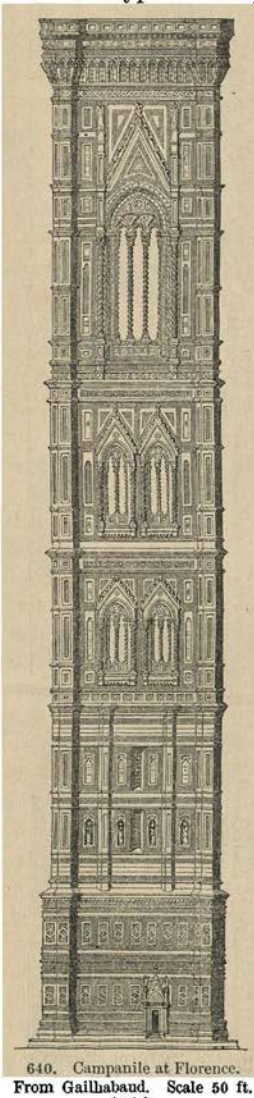
The campanile attached to the church of St. Andrea at Mantua (woodcut No. 639) is more completely Gothic both in its design and details. Its vertical

639. Campanile, S. Andrea, Mantua. From Street.

lines are strongly marked, and the string-courses and cornices are of moulded brickwork, which is a pleasing and characteristic feature in the architecture of Lombardy.

The worst part of this design is the smallness of the octagon and spire, and the unconnected mode in which they are placed on the roof of the tower.

The typical example of Italian towers is that erected close to the Duomo at Florence (woodcut No. 640) from designs by Giotto, commenced in 1324, and considerably advanced, if not nearly finished, at the time of his death two years afterwards.



640. Campanile at Florence. From Gailhabaud. Scale 50 ft. to 1 in.

Though hardly worthy of the praise that has been lavished on it, it certainly is a very beautiful building. Being covered with ornament from the base to the summit, it has not that nakedness which is the reproach of many others, and the octagonal projections at the angles give it considerable relief. Besides this, the openings are very pleasingly graduated. It is virtually solid for about one-third of its height. The middle division consists of two stories, each with two windows, while the upper part is lighted by one bold opening on each face as at Prato. All this is good. One great defect of the composition is its straightness. The slightest expansion of the base would have given it great apparent stability, which its height requires. Another fault is its being divided by too strongly marked horizontal courses into distinct stories, instead of one division falling by imperceptible degrees into the other, as in Northern towers. It has yet another defect in common with the Duomo to which it belongs: this is the false character of its ornamentation, which chiefly consists of a veneer of party-coloured slabs of marble, which, however beautiful in itself, is objectionable as not forming a part of the apparent construction.

The tower now rises to a height of 269 ft., and it was intended to have added a spire of about 90 ft. to this; but unless it had been more gracefully managed than is usual in Italy, the tower is certainly better without it. There is nothing to suggest a spire in the part already executed, nor have we any reason to believe that Giotto understood the true principles of spire building better than his contemporaries.

We may here notice the Toraccio of Cremona, though not an ecclesiastical edifice. This is a monumental tower commenced in 1296

to commemorate a peace made between Cremona and the neighbouring states after a long and tedious contest for supremacy. It partakes, therefore, like those of St. Mark's and Modena, more of the character of a civic belfry than of a church tower, such as those previously mentioned. It is the highest and largest, and consequently, according to the usual acceptation of the term, the finest, of Italian towers. Its whole height is 396 ft., about two-thirds of which is a square ungainly mass, without either design or ornament of any importance. On this is placed an octagon and spire, which, though in themselves perhaps the best specimens of their class in Italy, have very little connexion either in design or dimensions with the tower to which they are added.

PORCHES.

Another feature very characteristic of the Gothic style in Italy is to be found in the porches attached to the churches. Generally they are placed on the flanks and form side entrances, and in most instances they were added after the completion of the body of the building, and consequently seldom accord in style with it. One has already been illustrated as attached to the church at Asti (woodcut No. 623); another, belonging to the church of Sta. Maria dei Fiori at Florence, is an integral and beautiful part of the design.

One of the most characteristic specimens of the class in all Italy is that attached to the northern flank of the church of Sta. Maria Maggiore at Bergamo (woodcut No. 641). The principal archway and the doorway within it are circular in form, although built in the middle of the 14th century, and ornamented with trefoils and other details of the age. Above this are three trefoiled arches, the central one containing an equestrian statue of a certain Duke Lupus, at whose expense probably the porch was built, and above this is a little pagoda-like pavilion containing statues of the Virgin and Child.

The whole design is so unconstructive that it depends more on the iron ties that are everywhere inserted to hold it together than on any system of thrusts or counterpoises, which a true Gothic architect would certainly have applied.

The two main pillars rest on lions' backs, as is universally the case in these porches throughout Italy, though rarely found anywhere else.

Like most of these Italian porches, this one will not stand criticism as a purely architectural object, but its details are so beautiful and its colour so fascinating that it is pleasing in spite of all its defects of design, and is more characteristic of the truly native feeling shown in the treatment of the pointed style of architecture than the more ambitious examples which were erected under direct foreign influence.

641. North Porch, Sta. Maria Maggiore, Bergamo.
From Street's Brick and Marble of the Middle Ages.

Civic Buildings.

The free towns of Italy required civic buildings almost to the same extent as the contemporary examples in Belgium, though not quite of the same class. Their commerce, for instance, did not require trade-

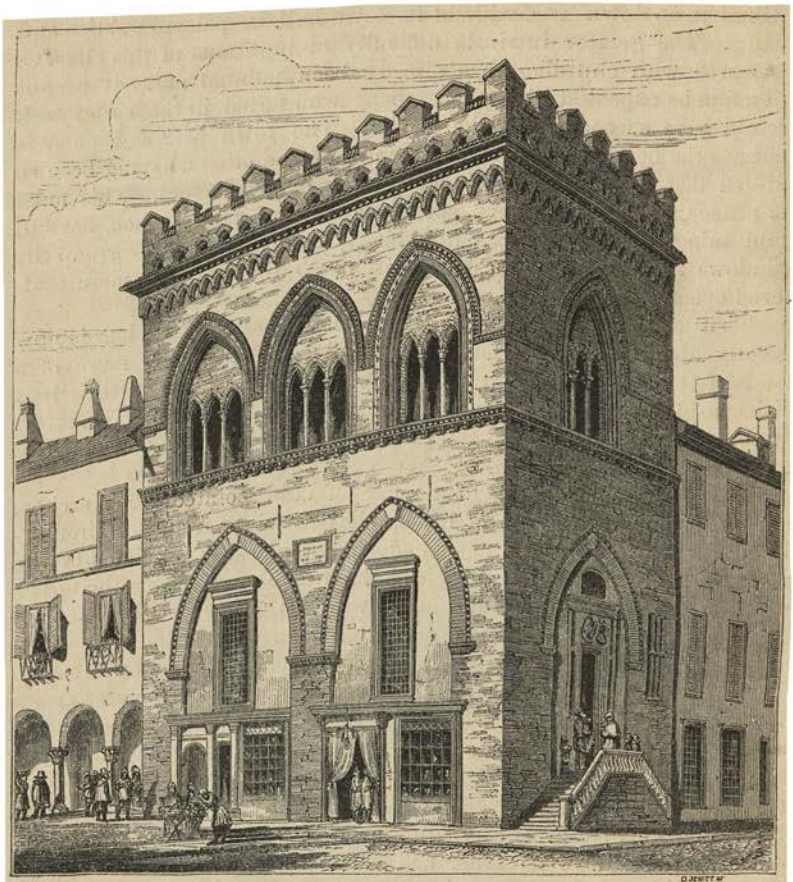
halls, but no town was without its town hall or palazzo publico and belfry. The greater intrinsic difficulty of buildings of this class, as compared with churches, has already been pointed out. It cannot therefore be expected that the Italians who failed in the easier task should have succeeded in the harder. The town hall at Sienna is perhaps the best existing example, most of the others having been so altered that it is difficult to judge of their original effect. This must be pronounced to be a very poor architectural performance, flat and unmeaning, and without any lines or style of ornament to group the windows together into one composition, so that they are mere scattered openings in the wall.

That at Perugia seems originally to have been better, but is now greatly disfigured. At Florence the Palazzo Vecchio is more of a feudal fortalice (required, it must be confessed, to keep the turbulent citizens in order) than the municipal palace of a peaceful community. In Ferrara and other cities the palazzo publico is really and virtually a fortress and nothing else.

At Piacenza it consists of a range of bold pointed stone arches, supporting an upper story of brick, adorned with a range of circular-headed windows, richly ornamented, and a pleasing specimen of the mode in which the Italians avoided the difficulty of filling the upper parts of their windows with tracery which they never liked, and at the same time rendered them ornamental externally.

At Padua and Vicenza are two great halls supported on arcades, in intention similar to that of Piacenza, but far from possessing its beauty. That at Padua remains in all its pristine ugliness, as hideous an erection as any perpetrated in the middle ages. The hall is one of the largest in Europe, measuring 240 ft. in length by 84 in width (Westminster Hall being 238 × 67), but wholly without ornament or beauty of proportion. Externally the arcades that are stuck to its sides do not relieve its mass, and are not beautiful in themselves. That at Vicenza, though originally very similar, has been fortunate in having its outside clothed in one of Palladio's most successful designs, being the only instance perhaps in which an addition of that age and style has improved a building of the Gothic period. Comparing this hall as it now stands with that at Padua, it must be admitted that the Italians were perfectly correct in abandoning their Gothic for the revived classical style, the improvement being apparent on the most cursory inspection.

A number of the town-halls or Brolettos in the smaller towns still remain unaltered, or nearly so, and retain all the peculiarities of their original design. The Palace of the Jurisconsults at Cremona for instance (woodcut No. 642) only requires its lower arcades to be again opened to present all the original features of its design, which resembles in almost every respect that of Piacenza above mentioned, except that the latter has 5 arches below and 6 windows above, instead of 2 and 3 as here shown. This building is wholly of brick, like most other civic buildings in the north of Italy. Sometimes, as at Piacenza, they are of stone below and brick in the upper stories. Sometimes, though rarely,



642. Palace of the Jurisconsults at Cremona.

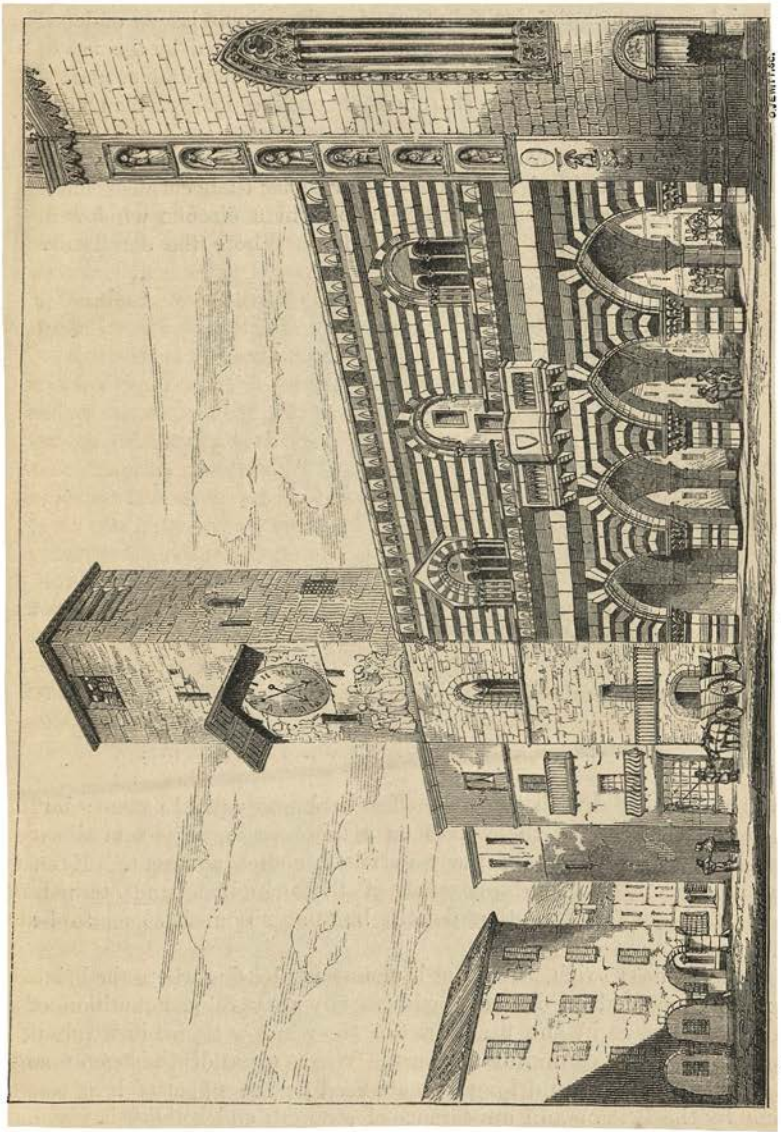
they are entirely faced with party-coloured marbles like the Broletto at Como (woodcut No. 643), which, though not extensive, is a very beautiful specimen of the best form of civic architecture of the best age in the north of Italy, and standing as it does between the cathedral on the one hand and its own rude old belfry on the other, it makes up an extremely pleasing group.[1]

One of the most important buildings of this style is the Great Hospital, Milan. It was founded in the year 1456, and consequently belongs to an age when the style was dying out. It still retains more of the pointed style and of Gothic feeling than could have been found in any city farther south, or in any one less impregnated, as it were, with German blood and feeling.

Almost all the windows in the part originally erected are pointed

[1] Similar buildings at Bergamo, Brescia, and Monza are illustrated in Mr. Street's beautiful work on the Architecture of the North of Italy, from which the two last illustrations are borrowed.

in form, and divided by mullions. Their principal ornament consists in garlands of flowers interspersed with busts and masks and figures of Cupids which surround them, or run along the string-courses of the building. The whole of these are in terra cotta, and make up a style



Broletto at Como.

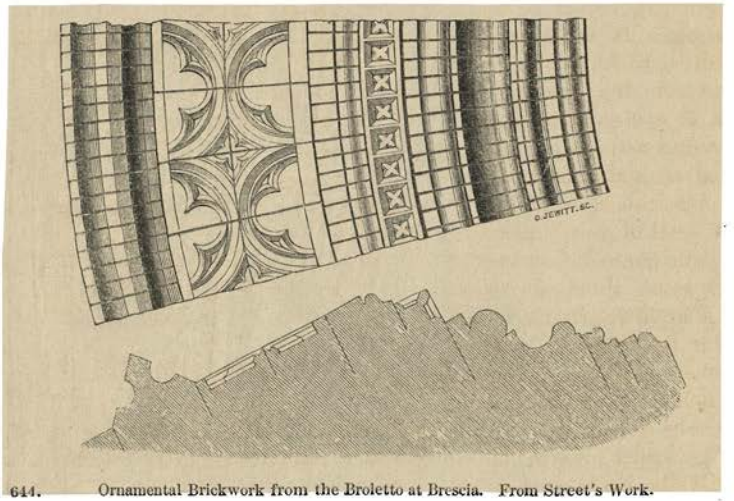
643.

of ornamentation as original as it is beautiful. It is besides purely local, and far superior to the best copies of Northern details, or to the misapplied forms of Gothic architecture which are so common in Italy.

There is perhaps nothing in the north of Italy so worthy of admi-

ration, and consequently of study, as the way in which they used moulded bricks of various kinds for the decoration especially of the civic buildings, but also occasionally in their churches. Sublimity is not perhaps to be attained in brick-work; the parts are too small; and if splendour is aimed at, it may require some larger and more costly material to produce the desired effect; but there is no beauty of detail or of design on a small scale that may not be obtained by the use of moulded bricks, and they are in themselves far more durable, and, if carefully burnt, retain their sharpness of outline longer, than most kinds of stone.

The most common way in which the Italians used this material was by repeating around their openings or along their cornices small copies of Gothic details, as in this example from a circular window in the Broletto at Brescia (woodcut No. 644). Where the details are



644. Ornamental Brickwork from the Broletto at Brescia. From Street's Work.

small and designed with taste, the effect is almost equal to stone; but where the details are themselves on a large scale, as is sometimes the case, the smallness of the materials becomes apparent. Even in this example the semi-quatrefoils of the principal band are perhaps too large for the other details, but not so much so as to be offensive.

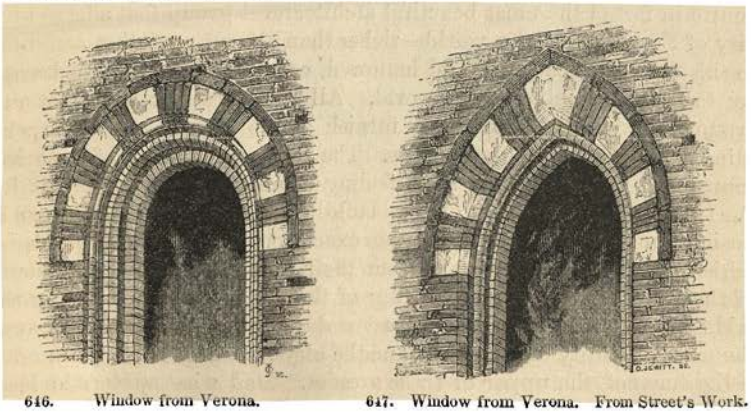
Though not so rich, the effect is almost as pleasing where the brick is merely moulded on its edge without any very direct repetition of Gothic details, as in the upper part of the window shown in woodcut No. 645, from the cathedral of Monza. Where great depth is given so as to obtain shadow, and long tiles are used for the upper arch as was done by the Romans, an appearance of strength and solidity is given to the construction unsurpassed by that obtained in any other material.

Perhaps the most pleasing application of terra cotta ornaments is where bricks of different colours are used so as to produce by variety of pattern that relief which cannot so well be given by depth of

shadow, and which is besides a perfectly legitimate mode of ornament when so small a material is used, and when beauty only, not sublimity, is aimed at.

This is sometimes produced in Italy by introducing stone of a different colour among the bricks, as in the two examples from Verona (woodcuts Nos. 646, 647); and where this mode of ornamentation is carried throughout the building, the effect is very pleasing. It is difficult, however, to know how to proportion the two materials to one another so as to produce exactly the effect aimed at, and seldom that the objection does not present itself of too much or too little stone being used. This want of shadow in brick architecture is most felt in the cornices, where sufficient projection cannot be obtained. The defect might be easily and legitimately got over by the employment of stone in the upper members of the cornice, but this expedient seems never to have been resorted to.

645. Window from the Cathedral of Monza. From Street's Work.



646. Window from Verona. 647. Window from Verona. From Street's Work.

There are few of these brick buildings of the north of Italy which are not open to just criticism for defects of design or detail, but this

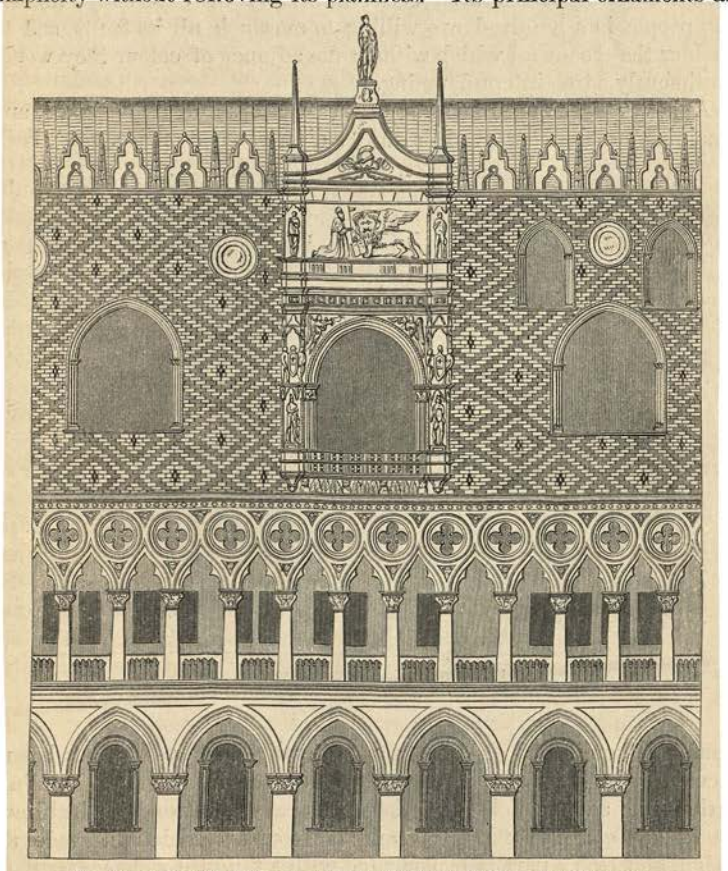
may arise from the circumstance that they all belong to an age when the Italians were using a style which was not their own, and employing ornaments of which they understood neither the origin nor the application. The defects certainly do not appear to be at all inherent in the material, and, judging from the experience of the Italians, were we to make the attempt in a proper spirit, we might create with it a style far surpassing anything we now practise.

Venice.

The most beautiful specimens of the civil and domestic architecture of Italy in the Gothic period are probably to be found in Venice, the richest and most peaceful of Italian cities during the middle ages. It is necessary to speak of the buildings of Venice, or, more correctly, of the Venetian Province, by themselves, the architecture being quite distinct both in origin and character from any other found in Northern Italy. It was not derived from the old Lombard round Gothic, but from the richer and more graceful Byzantine. True to its parentage, it partook in after ages far more of the Southern Saracenic style than of the Northern Gothic, still it cannot be classed as either Byzantine or Saracenic, but only as Gothic treated with an Eastern feeling, and enriched with many details borrowed from Eastern styles.

The largest and most prominent civic example of Venetian Gothic is of course the Doge's Palace (woodcut No. 648), a building which all the world agreed till very lately in thinking very ugly, though an attempt has recently been made to exalt it above the Parthenon, and all that was great and beautiful in Greece, Egypt, or Gothic Europe. There are indeed few buildings of which it is so difficult to judge calmly as of this, situated as it is, attached to the basilica of St. Mark's, facing the beautiful library of Sansovino, and looking on the one hand into the piazza of St. Mark's, and on the other across the water to the churches and palaces that cover the islands. It is the centre in fact of the most beautiful architectural group that adorns any city of Europe or of the world—richer than almost any other building in historical associations, and hallowed, especially to an Englishman, by the noblest poetry in the world. All this spreads a halo over and around the building, that may furnish ample excuses for those who blindly praise even its deformities. The soberer judgment of the critic must not be led astray by such feelings, and while giving credit for the picturesque situation of this building and a certain grandeur of design, must wholly condemn the execution of it. The two arcades which constitute the base are from their extent and from the beauty of their details as fine as anything of their class executed during the middle ages. There is also a just and pleasing proportion between the simple solidity of the lower, and the airy—perhaps slightly fantastic—lightness of the upper of these arcades. Had what appears to have been the original design been carried out, the building would rank high with the Alhambra and the palaces of Persia and India, but in an evil hour it was discovered that larger rooms were required for the

meetings of the council and for state occasions than were originally contemplated, and the upper wall, which was intended to stand on the back wall of the arcades, was brought forward even with the front, overpowering the part below by its ill-proportioned mass. This upper story too is far from being beautiful in itself. The windows in it are far too few, are badly spaced, squat, and ungraceful; and the introduction of smaller windows and circles mars what pretensions it might have to simplicity without relieving its plainness. Its principal ornaments are

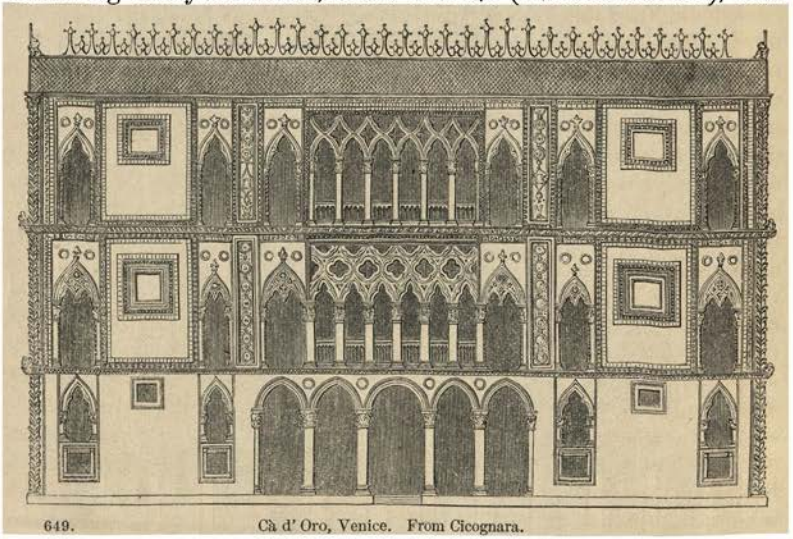


648. Central Part of the Façade of the Doge's Palace, Venice. From Cicognara.

two great windows, one in the centre of each face. These are not graceful objects in themselves, and having nothing in common with the others, they look too like insertions to produce an entirely satisfactory effect. The pierced parapet too is poor and flimsy, seen against the sky. Had it been placed as crowning the upper arcade, and backed by the third story, it would have been as pleasing as it is now poor. Had the upper story been set back, as was probably originally designed, or had it been placed on the ground and the arcades over it; had, in short, any arrangement of the parts been adopted but the one

that exists, this might have been a far more beautiful building than it is. One thing in this palace is worth remarking before leaving it—that almost all the beauty ascribed to its upper story arises from the polychromatic mode of decoration introduced by disposing pieces of different coloured marbles in diaper patterns. This is better done here than in Florence; inasmuch as the slabs are built into, not stuck on. The admiration which it excites is one more testimony to the fact that when a building is coloured either internally or externally, ninety-nine people in a hundred are willing to overlook all its faults, and to consider that beautiful which without the adjunct of colour they would unanimously agree in condemning.

A better specimen of the style, because erected as designed, and remaining nearly as erected, is the Cà d'Oro (woodcut No. 649), built



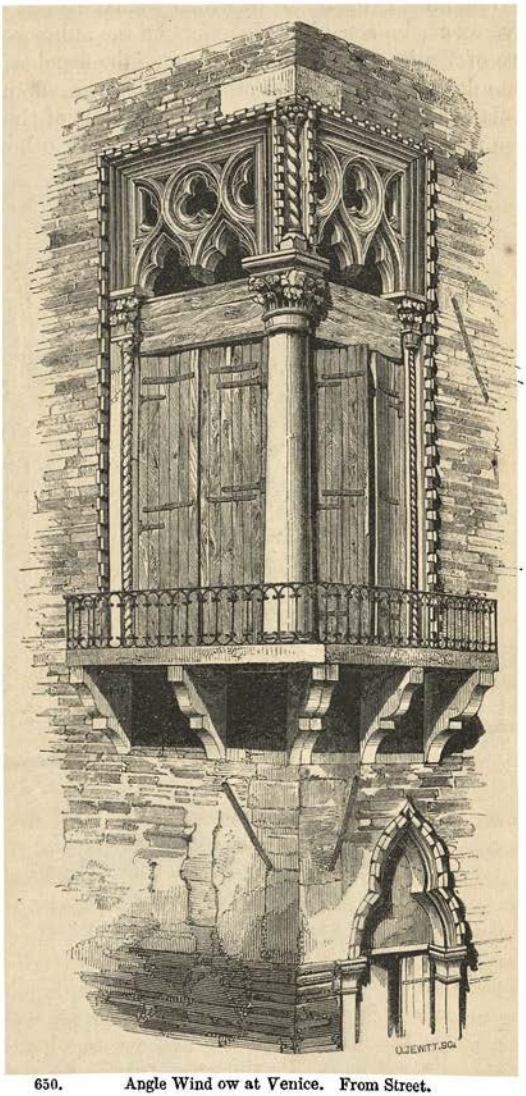
649. Cà d' Oro, Venice. From Cicognara.

10 20 30 40 50 feet.

about 1350, or nearly contemporary with the ducal palace. It has no trace of the high roofs or aspiring tendencies of the Northern buildings of the same age, no boldly marked buttresses in strong vertical lines, but on the contrary flat roofs and horizontal divisions pervade the design, and every part is ornamented with a fanciful richness far more characteristic of the luxurious refinement of the East than of the manlier appreciation of the higher qualities of art that distinguished the contemporary erections on this side of the Alps.

The palaces known as the Foscari and Pisani are very similar in design to that of Cà d' Oro, though less rich and less happy in the distribution of the parts; but time has lent them that colour which was an inherent part of the older design, and they are so beautiful and so interesting that it is hard to criticise even their too apparent defects as works of art. Most of the faults that strike us in the buildings of Venice arise from the defective knowledge which they betray of the constructive principles of the style. The Venetian

architects had not been brought up in the hard school of practical experience, nor thoroughly grounded in construction, as the Northern architects were by the necessities of the large buildings which they were erecting. The Venetians, on the contrary, merely culled details because they were pretty, and used them so as to be picturesque in domestic edifices, where construction was a very secondary consideration, and convenience everything. For instance, the window here shown (woodcut No. 650) must give to the building to which it is attached an appearance of weakness and insecurity quite inexcusable in spite of its picturesqueness externally, and its convenience with reference to the interior.



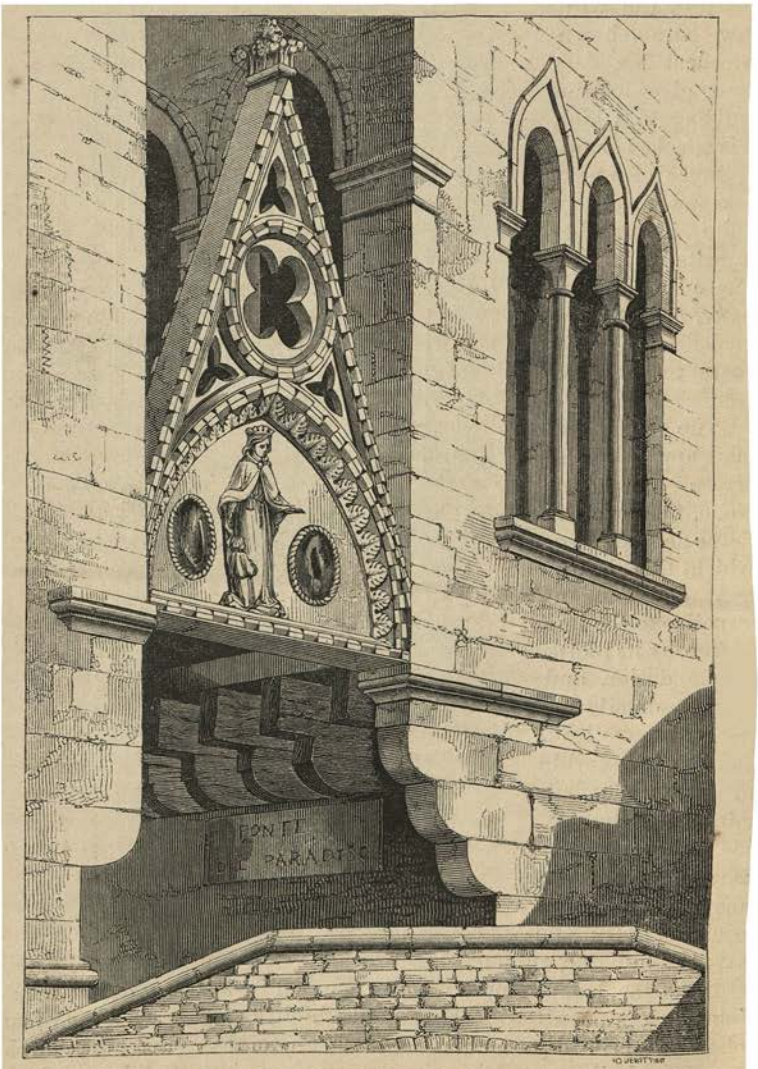
650. Angle Wind ow at Venice. From Street.

The same remark applies to the screen (woodcut No. 651) above the Ponte del Paradiso, which, though useless and unconstructive to the last degree, by its picturesque design and elegant details arrests all travellers, and it is impossible to see without admiring it, though, if imitated elsewhere, or copied in another place, it could hardly be saved from being ridiculous.

Like the last example it is surrounded by a curious dental moulding which is peculiar to Venice, and which, though scarcely ever found elsewhere, is hardly ever omitted round any of the arches of the churches or private buildings of this city during the pointed Gothic period.

There are besides these many smaller palaces and houses of the Gothic age, all more or less beautiful, and all presenting some detail or some happy arrangement well worthy of study, and in general more refined and more beautiful than is to be found in the rude but picturesque dwellings of the burghers of Bruges or Nuremberg.

The mixed Gothic style which we have been describing appears to have exerted a considerable effect on the subsequent palatial architecture of Venice. The arrangement of the façades remained nearly the same down to a very late period; and even when the so-called return to classical forms took place, many details of the previous style were here retained, which was not the case in any other part of Europe.



651. Ponte del Paradiso, Venice. From Street.

CHAPTER III.

NAPLES AND APULIA.

CONTENTS.

Buildings in Naples, Amalfi, &c. — San Nicola, Bari — Cathedrals of Bittonto, Matera, and Trani — Churches at Brindisi — General remarks.

CHRONOLOGY.

	DATES.		DATES.
The Normans enter Italy	A.D. 1018	William II., surnamed the Good	A.D. 1166
—— Conquer Apulia from the Greeks	1043	Tancred	1189
—— Attack the Saracens in Sicily	1061	Frederic Hohenstaufen of Germany	1197
Conquest of Sicily completed by Roger de Hauteville	1090	Conrad	1250
Roger II.	1101	Conradin	1254
William I., surnamed the Wicked	1153	Charles I., first Angiovine King of Naples	1266
		René, last Angiovine King of Naples	1435

VERY little is known of the mediæval architecture of the kingdom of Naples, though it can hardly be doubted, from the wealth and importance of many of the cities within its limits in the middle ages, that a considerable number of churches must have been erected during that period, many of which must still remain. The extent and interest of the classical remains in this district are so great that the Christian antiquities have hitherto been very much overlooked, but their examination would well reward the trouble of any one who would undertake the task.

The prosperity and population of the capital have increased so immensely since the Gothic period, that all the churches there have either been rebuilt or so altered as to present few features of interest now. Many possess fragments of the pointed style of France, which was introduced by the house of Anjou. It is, however, even more essentially a foreign introduction here than the Tedesco of the north of Italy, and used by a people who understood neither its principles nor their application. It presents few features worthy of study or admiration.

On the south side of the bay, the cathedrals of Amalfi and Ravello still retain parts of their original structures sufficient to show what they originally were, and to make us regret the alterations which have so completely destroyed the general effect of their rich and varied architecture. Their style may be characterised as Romanesque, with a considerable admixture of Greek elegance of ornament and of Saracenic richness in colouring—a combination which, especially in that climate, is productive of the highest class of architectural beauty.

The frequent earthquakes of Calabria have destroyed nearly all the monuments not only of the Normans, but of the previous centuries, in

that rich and important province; and nothing now remains of the Norman capital of Mileto but the massive foundations of the churches and palaces, with a few fragments of columns, and the sarcophagi which are said to have contained the remains of Count Roger of Sicily and of his wife Eremberga.

The eastern province of Apulia[1] seems to have escaped, to a great extent, the two ecclesiological evils of over-population and of earthquakes, and consequently retains many buildings of very great interest. During the whole period which elapsed from the time of Justinian nearly to the Norman conquest, Apulia seems to have shared in all the troubles that oppressed Italy in the dark ages. Under the successive rule of the Gothic kings of Ravenna, the Lombard dukes of Benevento, the German Othos, and of the Greek emperors of Constantinople, she had little time for cultivating the arts of peace. Her greatest misfortunes arose from the ravages of the Saracens in the 9th century. They never settled, to any extent, within her boundaries, but burnt and destroyed her cities, and plundered everything within their reach. On their expulsion, in the beginning of the 10th century, she enjoyed her first period of repose and prosperity under the Greek Catapani till the time of the Norman invasion in the beginning of the 11th; and it was probably during this period that the cathedral at Matera and others of the older churches were erected, though by far the greater number of those now found in the province belong to the age of the Norman and Angiovine dynasties.

It is by no means clear whether any churches more ancient than the Saracenic invasion still remain. Many of course did exist in the interior which could not have been destroyed by these conquerors, and they may consequently still be found when looked for. At all events their influence is felt in those which succeeded, as the style of Apulia is remarkably local in its character, and must have grown up in the province where it is found.

One of the most important and best known churches in this province is that of San Nicola at Bari, founded in 1087, at which time the relics of its patron saint were brought from Myra in Lycia. It was dedicated in 1103.

Internally the church is divided into three aisles by screens of columns of singularly classical design. The side aisles are vaulted. The central aisle is spanned at irregular intervals by great arches, which seem to have supported the roof in some manner not now easily intelligible in consequence of alterations which have destroyed its effect to a considerable extent.

Externally it remains nearly perfect, and its western entrance (woodcut No. 652) is a highly characteristic example of the style. The doorway is flanked by two elegant pillars, very similar to those

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[1] The three woodcuts, and nearly all the information contained in this chapter, were kindly furnished by Mr. A. J. Roberts Gawen, who is one of the very few persons who have made a special study of Apulian art. There is also a very beautiful work by the Duc de Luynes, entitled 'Recherches sur l'Histoire des Normands et de la Maison de Souabe dans la Pouille.'

at Alet (woodcut No. 476), which here support the usual Italian hood. These pillars rest on monsters more important and more conventional than any found in similar situations in the north of Italy. On either side of the doorway are two pillars borrowed from some classical building, and used merely as ornaments.

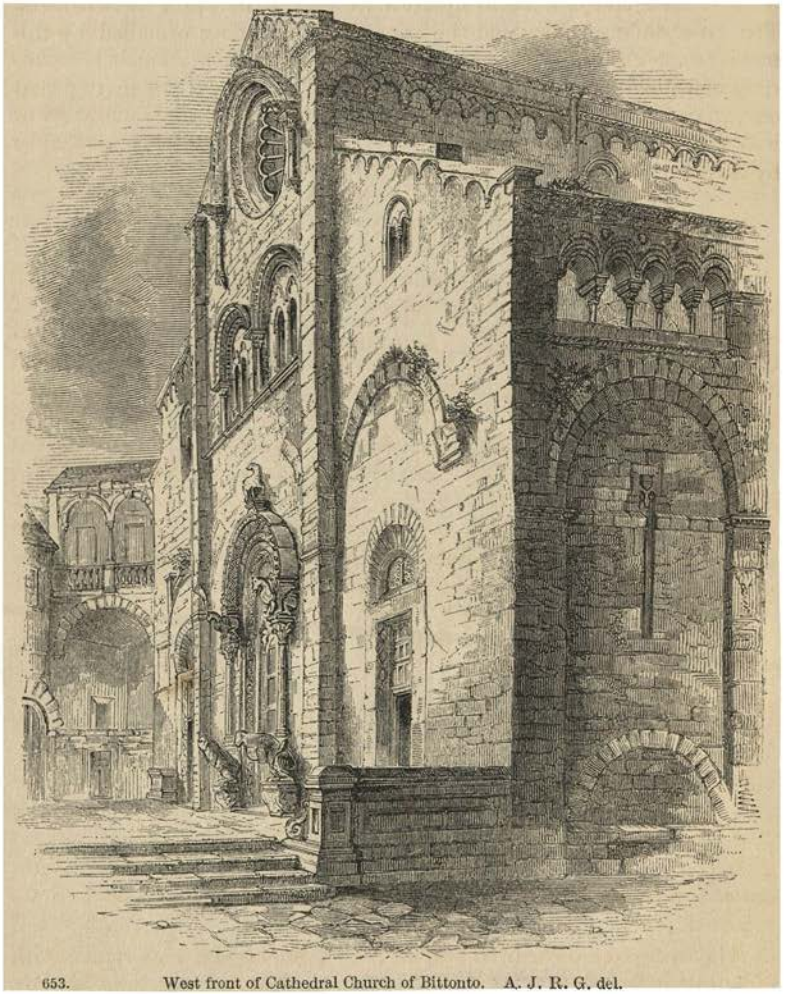
Another doorway almost equally beautiful adorns the southern front, near its eastern end. Though less ornamented outside, it is so deep as to contain a canopied tomb of very rich and elaborate workmanship.

The east end is flat and square externally, the space between the circular apse internally and the square angles being occupied by the sacristies.

The cathedral at Bari is a church of earlier date than that of San

652. West front of the Church of San Nicola in Bari. From a sketch by A. J. R. Gawen, Esq.

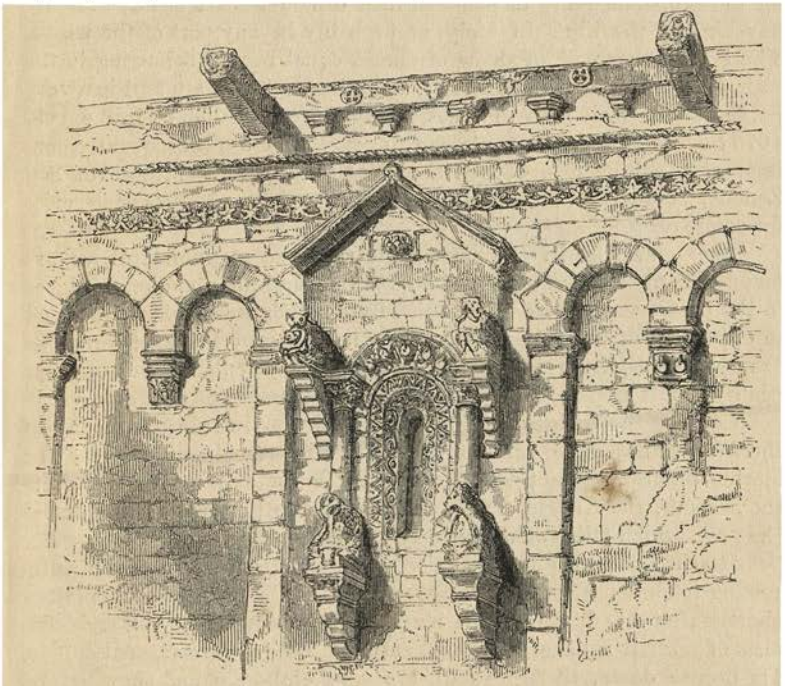
Nicola, but, having been destroyed by the Saracens, was rebuilt and dedicated anew in 1171. It is of rather larger dimensions than San Nicola; like it, the eastern end is flat externally, with one very richly ornamented window in the centre with pillars supported on elephants. This end is flanked by two towers of very elegant form and detail, and nearly 200 ft. in height, between which is a small cupola of Byzantine design on the intersection of the nave and transepts. It has been a good deal altered internally and also on its principal façades, and has consequently attracted much less attention than it deserves.



653. West front of Cathedral Church of Bittonto. A. J. R. G. del.

The apse of a small chapel of the same age as San Nicola is shown on the left of the last woodcut, and many other fragments of the same age exist in the town, but none so important as those described above.

The cathedral at Bittonto is even richer and more ornate than the two churches at Bari. Like them, it is a three-aisled basilica with a square east end, with the same peculiar ornament of two windows with pillars supported by elephants. Its west front (woodcut No. 653) may be taken as the type of almost all those of this province. Over the richly-sculptured porch are two windows filled with an imperfect kind of tracery, and above these a circular window of rich design surmounted by a very ornamental hood. The same arrangement on about the same scale occurs at Bari, Altamura, and Ruvo; and on a somewhat smaller scale in the churches of Gallatina, Brindisi, and Barletta. The great and peculiar beauty of the cathedral at Bittonto is its south front, one angle of which is shown in the last woodcut; but it becomes richer towards the east, where it is adorned with a portal of great magnificence and beauty. The richness of its open gallery under what was the roof of the side aisles is unsurpassed in Apulia, and probably by anything of the same kind in Italy.



654. Window in the south side of the Cathedral Church in Matera. A. J. R. G. del.

The cathedral church at Matera is of almost equal importance with those just mentioned, with this peculiarity, that its west front is plain and unimportant, and all the decoration has been lavished on its south front, which faces the piazza. There are two entrances on this face, that towards the east being as usual the richest. Above these are a range of richly-ornamented windows, and a little out of the centre is

one far more splendid than the others (woodcut No. 654), from which it is said that letters and rescripts from the Greek patriarch at Constantinople used to be read. It is perhaps as elaborate a specimen of the mode of decoration used in these churches as can be found in the province.

The age of this church is probably about the year 1000, and consequently anterior to the Norman conquest. Its dimensions are 180 ft. long by 60 in width. Its campanile is 175 ft. in height. Though perhaps richer in decoration, it appears to be smaller than most other cathedral churches in the province.

The cathedral church at Trani seems to be larger and more important than those mentioned above, and possesses a campanile seven stories in height, the upper being an octagon surmounted by a low spire; it is apparently the loftiest in the province. The most interesting features about this church are the doors of bronze that ornament its principal portal. These were made in 1160, and either for beauty of design or for the exuberance and elegance of their ornaments are unsurpassed by anything of the kind in Italy, or probably in any part of the world. There is another pair of doors of almost equal beauty belonging to the cathedral at Troja, made in 1119, and a third, which are still in a very perfect state, which were constructed at Constantinople in the year 1076 for the church of Monte San Angelo: they are consequently contemporary with those of Sta. Sophia, Novogorod, and those of San Zenone, Verona, and so similar in design as to form an interesting series for comparison.

Other churches in the same style as those mentioned above are found at Canosa, Giovenazzo, Molo, Ostuni, Manduria, and other places in the province. Those of Brindisi, from which we should be inclined to expect most, have been too much modernised to be of value as examples; but there is in this town a small circular church of great beauty, built apparently by the Knights Templars, and afterwards possessed by the Knights of St. John. It is now in ruins, but many of the frescos that once adorned its walls still remain, as well as the marble pillars that supported its roof. Being at some distance from the harbour, the Knights of St. John built another small church near the port, which still remains nearly unaltered.

Attached to the church at Canosa externally is a small but interesting tomb-house, erected to the memory of Bohemond by his mother shortly after his death. It is singularly classical in detail, and consists of a small square apartment surmounted by an octagonal cupola. Its bronze doors, though small, are very elaborate, and show strong traces of Arabic taste, which is not found in any other example in the province.

About a mile out of Brindisi is found the small convent chapel of Sta. Maria del Casale, of a considerably more modern date than any of those mentioned above, having been built in the first half of the 14th century, by Philip Prince of Taranto, brother of Charles II. of Anjou. The hood over its principal doorway is slightly pointed; one of the few examples of this form in Apulia. It is supported by bold stone

brackets let into the wall, instead of the rich columns resting on the backs of lions and monsters usual in this part of Italy; and altogether shows much more resemblance to the pointed architecture of the north of Italy than almost any other church in Apulia.

The House of Swabia seem to have destroyed more churches than they built, but they have left several important castles and palaces which are well worthy of study. That of Lucera is perhaps the most extensive, but the Castel del Monte, built by Frederic II., is the most beautiful, and as a specimen of the Pointed style as applied to civil buildings is quite equal to anything else found anywhere in Italy.

The style of architecture which most resembles that used in Apulia is the one we find prevailing in the valley of the Po during the 12th and the early part of the 13th centuries; but we miss entirely in the south the reed-like pilasters which formed so favourite a mode of decoration in Verona and elsewhere; we miss also the figured sculpture which everywhere adorned the northern portals and façades. The Greek iconoclastic feeling prevailed to such an extent in the south as entirely to prevent the introduction of the human form, either in bas-reliefs or in single figures; but the architects indemnified themselves for this by the introduction of lions, elephants, and monsters of all sorts, to an extent found nowhere else, and by the lavish employment of sculptured foliage and richly-carved frets and mouldings, and a bold system of bracketing, which gave to the style as much richness as can be desired, often combined with great beauty of detail.

We miss also in this province the pointed arch which the Saracenic architects introduced so currently into the contemporary churches in Sicily. Though forming part of the same kingdom during the Norman period, there is very little in Apulia that betrays the influence of the Saracenic style. The only striking example apparently is the crypt of San Nicola at Bari, which probably was adorned by workmen sent from Palermo for the purpose, and who introduced there the same style which they had employed under the same masters in the palaces of La Cuba and La Ziza, or the royal churches of Monreale and Palermo.

Strictly speaking, the style of Apulia may be called Romanesque carried out with a strong admixture of Greek or Byzantine feeling in the details, but still retaining its local and Italian character more essentially perhaps than any other of the styles which prevailed in Italy during the middle ages.

CHAPTER IV.

SICILY.

CONTENTS.

Population of Sicily—The Saracens—Buildings at Palermo—Cathedral of Monreale—Cefalu—The Pointed Arch.

There are few, at least among the shorter chapters of architectural history, more interesting, in various ways, than that which treats of the introduction of the pointed-arched style into Sicily, and of its peculiar development there. Its whole history is so easily understood, the style itself so distinct from that of any other branch, and at the same time so intrinsically beautiful, that it is of all the divisions of the subject the one best suited for a monography, and so it seems to have been considered by many—Hittorff and Zanth, the Duke of Serra di Falco, and our own Gally Knight having chosen it for special illustration, so that in fact there are few European styles of which we have more complete knowledge. Many of the points of its history are nevertheless still subjects of controversy, not from any inherent obscurity on the subject, but because it has been attempted to apply to it the rules and theories derived from the history of Northern art.

The fact is, the map of Sicily tells its whole history; its position and form reveal nearly all that is required to be known of the races that inhabited it, and of their fate. Situated in the centre of the Mediterranean Sea, of a nearly regular triangular form, and presenting one side to Greece, another to Africa, and a third to Italy, the length of these coasts, and the relative distance from the opposite shores, are nearly correct indexes of the influence each has had on the civilization of the island.

In a former chapter[1] it was shown how strong was the influence of Dorian Greece in Sicily. Almost all the ancient architectural remains belong to that people. The Carthaginians, who succeeded the Greeks, have left but slight traces of humanising influence; and the rule of the Romans was that of conquerors, oppressive and destructive of the civilization of the people. After the Christian era a very similar succession of influences took place. First and most powerful was the Byzantine element, which forms the groundwork and the main ingredient in all that follows. To this succeeded the Saracenic epoch: bright, brilliant, but evanescent. In the 11th century the Italian element re-

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[1] P. 264.

sumed its sway under the banner of a few Norman adventurers, and in the guise of a Norman conquest; and sacerdotal Rome regained the inheritance of her imperial predecessor. In the Christian period, however, the elements were far from being so distinct as on the previous occasion, for reasons easily understood. Every fresh race of masters found the island already occupied by a very numerous population of extremely various origin. The new-comers could do no more than add their own forms of art to those previously in use, the consequence being in every case a mixed style containing elements derived from every portion of the inhabitants.

We have now no means of knowing what the exact form of the Byzantine churches of Sicily was before the Arab invasion. All have perished, or at least are undescribed. The Saracenic remains, too, have all disappeared, those buildings generally supposed to be relics of their rule being now proved to have been erected by Moorish workmen for their Christian masters. With the Norman sway a style arose which goes far to supply all these deficiencies, being Greek in essence, Roman in form, and Saracenic in decoration; and these elements mixed in exactly those proportions which we should expect. Nowhere do we find the square forms covered by domes of the Greek Church, nor one suited to the Greek ritual. These have given place to the Roman basilica, and the arrangement adapted to the rites of the Romish Church; but all the work was performed by Greek artists, and the Roman outline was filled up and decorated to suit the taste and conciliate the feelings of the worshippers, who were conquered Greeks or converted Moors. Their fancy, too, as richer and happier than that of the ruder races of the West, was allowed full play. An Eastern exuberance in designing details, and taste in applying colours, is here exhibited, cramped a little, it must be confessed, by the architectural form and the ritual arrangements to which it is applied, but still a ruling and beautifying principle throughout.

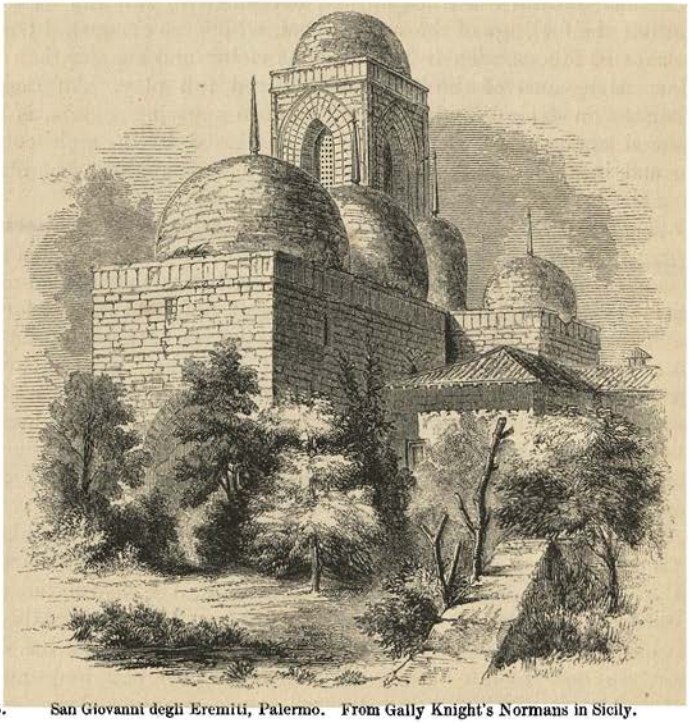
Among all these elements, those who are familiar with architectural history will hardly look for anything indicative of purely Norman taste or feelings. A mere handful of military adventurers, they conquered as soldiers of Rome and for her aggrandisement, and held the fief for her advantage: they could have brought no arts even if their country had then possessed any. They were content that their newly-acquired subjects should erect for them palaces after the beautiful fashion of the country, and that Roman priests should direct the building of churches suited to their forms, but built as the Sicilians had been accustomed to build, and decorated, as they could decorate them, better than their masters and conquerors.

All this, when properly understood, lends an interest to the history of this little branch of architecture, wholly independent of its artistic merit; but even the art itself is so beautiful and so instructive, from its being one of the styles where polychromy was universally employed and is still preserved, that notwithstanding all that has been done, it still merits more attention than has yet been bestowed upon it.

It is extremely difficult, in a limited space, to give a clear account

of the Sicilian pointed style, owing to the fusion of the three styles of which it is composed being far from complete or simultaneous over the whole island, and there being no one edifice in which all three are mixed in anything like equal proportions. Each division of the island, in fact, retains a predilection for that style which characterised the majority of its inhabitants. Thus Messina and the northern coast as far as Cefalu remained Italian in the main, and the churches there have only the smallest possible admixture of either Greek or Saracenic work. The old parts of the Nunziatella at Messina might be found at Pisa, while the cathedral of this town, and that at Cefalu, would hardly be out of place in Apulia, except indeed that the last-named cathedral displays a certain early predilection for pointed arches, and something of Greek feeling in the decoration of the choir.

In like manner in Syracuse and the southern angle of the island, the Greek feeling prevails almost to the exclusion of the other two. In Palermo, on the other hand, and the western parts, the architecture is so remarkably Saracenic that hardly any antiquarian has yet been able to make up his mind to admit the possibility of such buildings as the Cuba and Ziza having been erected by the Norman kings. There is, however, little or no doubt that the latter was erected by William I. (1154–1169), and the other about the same time, though by whom is not quite so clear. Both these buildings were erected after a century of Norman dominion in the island: still the Moorish in-

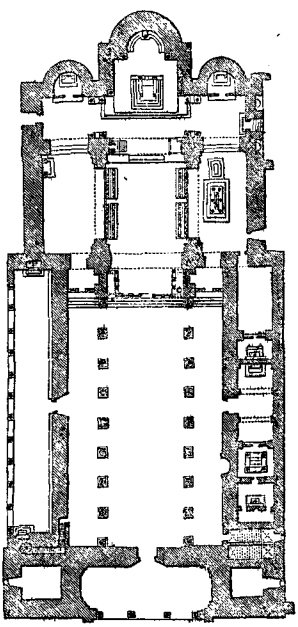


655. San Giovanni degli Eremiti, Palermo. From Gally Knight's Normans in Sicily.

fluence, here so predominant, is not a subject of wonder when we consider the immeasurable superiority of that people in art and civilization, not only to their new rulers, but to all the other inhabitants. It was therefore only natural that they should be employed to provide for the Norman Counts such buildings as they only had the art to erect or adorn.

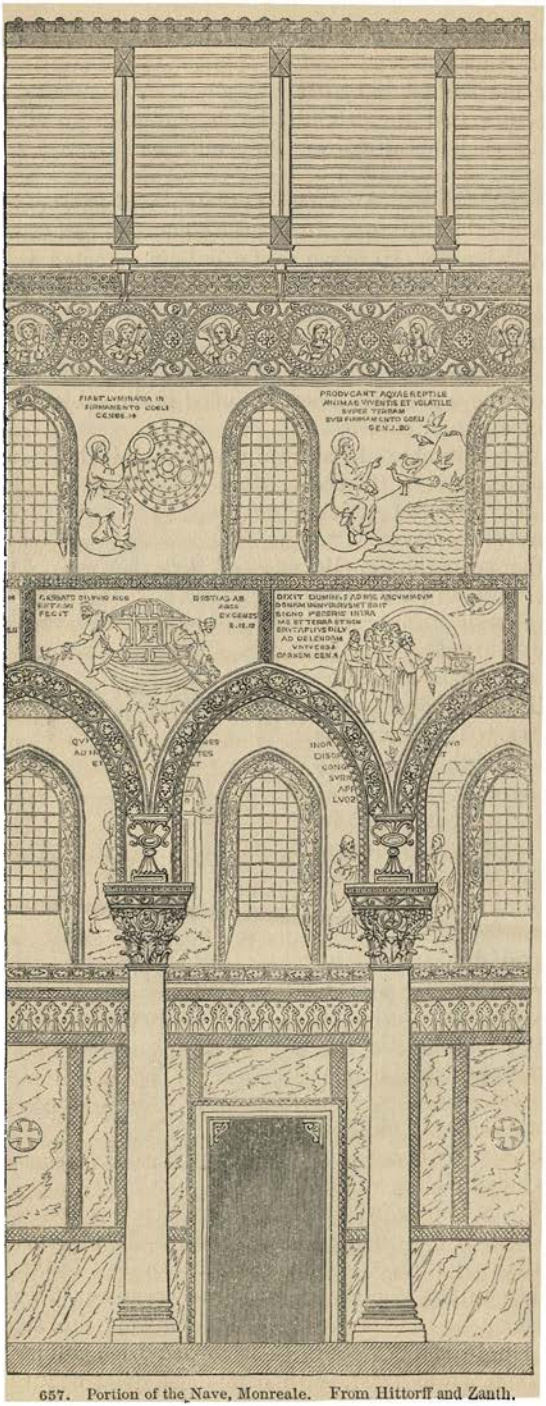
A still more remarkable instance of the prevalence of Saracenic ideas is represented in woodcut No. 655, being the Church of San Giovanni degli Eremiti at Palermo. Here we find a building erected beyond all doubt as late as the year 1132, by King Roger, for the purposes of Christian worship, which would in no respect be out of place as a mosque in the streets of Delhi or Cairo, except in the form of its tower. In fact, were we guided by architectural considerations alone, this church would have more properly been included in the subject of Saracenic, not of Christian architecture.

There are three other churches of Palermo which exhibit the new mixed style in all its completeness. These are the Martorana (1113-1139), in which the Greek element prevails somewhat to the exclusion of the other two; the Capella Palatina in the Palace, built in 1132; and the more magnificent church of Monreale, near Palermo (woodcut No. 656), begun in 1174, and certainly the finest and most beautiful of all the buildings erected by the Normans in this country. This church is 315 ft. in its extreme length; while the beautiful gem-like chapel of the royal palace is much smaller, being only 125 ft. long, and consequently inferior in grandeur, but in the relative proportions of its parts, and in all other essential points, very similar.



656. Plan of Church at Monreale. From Hittorff and Zanth. Scale 100 ft. to 1 in.

In arrangement and dimensions the cathedral of Monreale very much resembles that at Messina, showing the same general influence in both; but all the details of the Palermitan example betray that admixture of Greek and Saracenic feeling which is the peculiarity of Sicilian architecture. There is scarcely one single form or detail in the whole building which can strictly be called Gothic, or which points to any connexion with Northern arts or races. The plan of this, as of all the Sicilian churches, is that of a Roman basilica, far more than of a Gothic church. In all these churches no vault was ever either built or intended. The central is divided from the side aisles by pillars of a single stone, generally borrowed from ancient temples, but, in this instance at least, with capitals of great beauty,



657. Portion of the Nave, Monreale. From Hittorff and Zanth.

suited to their form and to the load they have to support. The pier-arches are pointed, but not Gothic, having no successive planes of decoration, but merely square masses of masonry stilting arches of equally simple form. The windows, too, though pointed, are undivided, and evidently never meant for painted glass. The roofs of the nave are generally of open framing, like those of the basilicas, ornamented in Saracenic taste. The aisles, the intersection of the transepts and nave, and the first division of the sanctuary are generally richer, and consequently more truly Moorish. The apse again is Roman. Taken altogether, it is only the accident of the pointed arch having been borrowed from the Moors that has led to the idea of a Gothic feeling existing in these edifices. It does exist at Messina and Cefalu, but here is almost wholly wanting.

It is evident that all the architectural features in the buildings of which the cathedral of Mon-

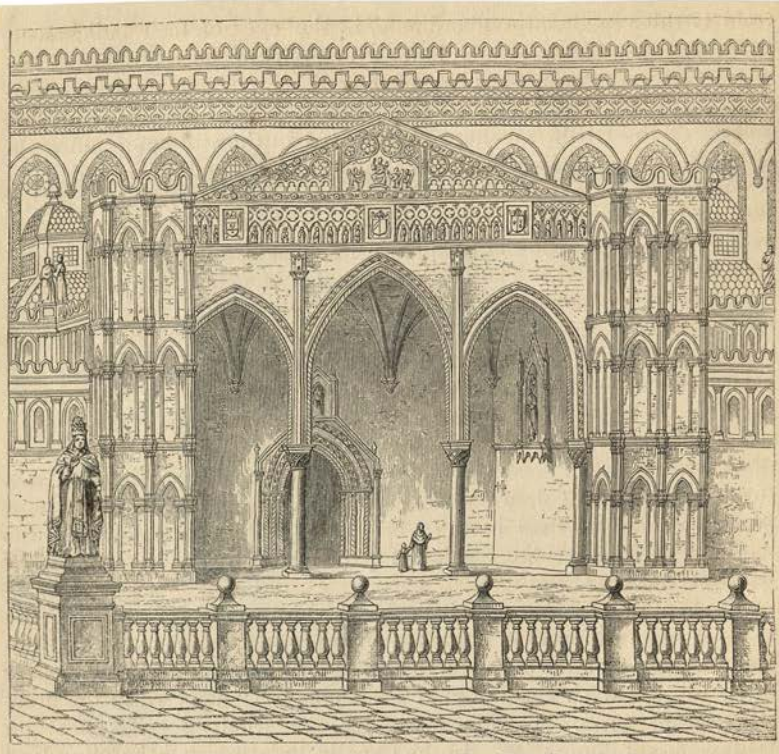
reale is the type, were subordinate, in the eyes of their builders, to the mosaic decorations which cover every part of the interior, and are in fact the glory and the pride of the edifice, and alone entitle it to rank among the finest of mediæval churches. All the principal personages of the Bible are here represented in the stiff but grand style of Greek art, sometimes with Greek inscriptions, and accompanied by scenes illustrating the Old and New Testaments. They are separated and intermixed with arabesques and ornaments in colour and in gold, making up a decoration unrivalled in its class by anything the middle ages have produced. The church at Assisi is neither so rich nor so splendid. The Certosa is infamous in taste as compared with this Sicilian cathedral. No specimen of opaque painting of its class, on this side of the Alps, can compete with it in any way. Perhaps the painted glass of some of our cathedrals may have surpassed it, but that is gone. In this respect the mosaic has the advantage. It is to be regretted that we have no direct means of comparing the effect of these two modes of decoration. In both the internal architecture was subordinate to the colour—more so perhaps, as a general rule, in these Sicilian examples than in the North. In fact the architecture was merely a vehicle for the display of painting in its highest and most gorgeous forms.

Besides the mosaic paintings which adorn the upper part of the walls of these Palermitan churches, they possess another kind of decoration almost equally effective, the whole of the lower part of the walls being revêted with slabs of marble or porphyry disposed in the most beautiful patterns. The Martorana depends wholly for its effect on this species of decoration. In the Capella Palatina, and the church at Monreale, it occupies only the lower part of the walls, and serves as a base for the storied decorations above; but whether used separately or in combination, the result is perfect, and such as is not produced by any other churches in any part of Europe.

Externally the Gothic architects had immensely the advantage. They never allowed the coloured decorations to interfere with their architectural effects. On the contrary, they so used them as to make their windows their most beautiful and attractive features.

The cathedral of Palermo, the principal entrance of which is shown in woodcut No. 658, is a building of much later date, what we now see being principally of the 14th century. Although possessing no dignity of outline or grace of form, it is more richly ornamented with intersecting arches and mosaic decorations externally than almost any other church of its class. It is richer perhaps and better than the cathedral of Florence, inasmuch as here the decorations follow the construction, and are not a mere unmeaning panelling that might be applied anywhere. Still the effect of the whole is rather pretty than grand, and as an architectural display falls far short of the bolder masonic expression of the Northern Gothic churches.

After these, one of the most important churches of that age in the island is the cathedral of Cefalu, already alluded to. It was commenced by King Roger in 1131. It is 230 ft. long by 90 ft. wide.



658. Lateral Entrance to Cathedral at Palermo. From Hittorff and Zanth.

The choir and transepts are vaulted and groined; the nave has a wooden roof; all the arches are pointed; and with its two western towers it displays more Gothic feeling than any other church in Sicily.

The cathedral at Messina, though very much resembling that at Monreale in plan, has been so altered and rebuilt as to retain very little of its original architecture. The other churches in the island are either small and insignificant, or, like that at Messina, have been so altered that their features are obliterated.

Besides the Saracenic castles or palaces above mentioned, there are no important civil buildings of mediæval style in Sicily. There are two cloisters—one at Monreale and the other at Cefalu—both in the style universal in all the countries bordering on the Mediterranean Sea, and already described in speaking of those of Elne, Fontifroide, Arles, &c., as well as those of San Giovanni Laterano at Rome. Their general arrangement consists of small but elegant pillars of Corinthian design, in pairs, supporting pointed arches of great elegance of form. In many respects this is a more beautiful mode of producing a cloistered arcade than the series of unglazed windows which were universally adopted in the North. This Southern method presupposes a wooden, or at most a tunnel-vaulted roof, as at Arles, whereas all our

best examples have intersecting vaults of great beauty, which indeed is the excuse for the windowed arrangement assumed by them. An intermediate course, like that adopted at Zurich (woodcut No. 429), would perhaps best reconcile the difficulty; but this was only used during the period of transition from one style to the other. The effect, however, of the cloister at Monreale, with the fountain in one of its divisions, and a certain air of Eastern elegance and richness pervading the whole, is not surpassed by any of the examples on the Continent of its own size, though its dimensions do not admit of its competing with some of the larger examples of France, and especially of Spain.

As the employment of the pointed arch so early in Sicily has been much quoted in the controversy regarding the invention of that feature, it may be convenient to recapitulate here what has already been said on that subject—this being the last occasion on which it will be requisite to refer to it in the course of this work.

We have already seen that the pointed arch was used in the south of France—at Vaison for instance—at least as early as the 10th century, but only as a vaulting expedient. During the 11th it was currently used in the south, and as far north as Burgundy; and in the 12th it was boldly adopted in the north as a vaulting, constructive, and decorative feature, giving rise to the invention of a totally new style of architectural art.

It is by no means impossible that the pointed arch may have been used by the Greek or Pelasgic colonists about Marseilles at a far earlier date, but this could only have been in arches or domes constructed horizontally. These may have suggested its use in radiating vaults, but can hardly be said to have influenced its adoption. Had it not been for the constructive advantages of pointed arches, the Roman circular form would certainly have retained its sway. It is possible, however, that the northern Franks would never have adopted it so completely as they did had they not become familiar with it from its use either in Sicily or the East. When once they had so taken it up, they made it their own by employing it only as a modification of the round-arched forms previously introduced and perfected.

In Sicily the case is different; the pointed arch there never was either a vaulting or constructive expedient—it was simply a mode of eking out, by stilting, the limited height of the Roman pillars, which they found and used so freely. It is precisely the same description of arch as that used in the construction of the mosque El Aksah at Jerusalem in the 8th century (woodcut No. 312); at Cairo in rebuilding that of Amrou in the 9th or 10th, in the Azhar and other mosques of that city, and also, I believe, in the old mosque at Kairoan, which was the immediate stepping-stone by which it crossed to Sicily. It was used too in Spain, at Cordova and Granada, before and after its introduction here, till it became a settled canon of art, and a usual form of Moorish architecture. As such it was used currently in Sicily by the Moors, and in Palermo and elsewhere was so essentially a part of the architecture of the day that it was employed as a matter of course in the churches; but it neither was introduced by the Normans, nor carried by them

from Sicily into France, and, except so far as already stated, it had no influence on the arts of France. In fact there is no connexion, either ethnographically or architecturally, between the Sicilian pointed arch and the French, and beyond the accident of the broken centre they have nothing in common.

Although therefore it will hardly again be used as bearing upon the question of the invention of the pointed arch, the architecture of Sicily deserves a better monography than it has yet been made the subject of. It must, however, be written by some one more intimately familiar with the Byzantine, Saracenic, and Romanesque styles than those have been who have hitherto undertaken the task. To any one so qualified it will afford the best field to be found in Europe for tracing the influence of race and climate on architecture; for nowhere, owing in a great measure to its insular position, are the facts more easily traced, or the results more easily observed.

In one other point of view also the style deserves attention, for it is only from it that we can fairly weigh the merit of the two systems of internal decoration employed during the middle ages. By comparing, for instance, the cathedral at Monreale with such a building as the Sainte Chapelle at Paris, we may judge whether polychromy by opaque pictures in mosaic, or by translucent pictures on glass, is the more beautiful mode of decorating the interior of a building. The former have no doubt the advantage of durability, but for real beauty and brilliancy of effect I have little doubt that nine persons out of ten would prefer the latter. The question has never yet been fairly discussed; and examples sufficiently approximating to one another, either in age or style, are so rare that its determination is not easy. For that very reason it is the more desirable that we should make the most of those examples we have, and try if from them we can settle one of the most important questions which architectural history has left for us to determine with reference to our future progress in the art.

BOOK VII.

SPAIN AND PORTUGAL.

CHAPTER I.

SPAIN.

CONTENTS.

Subject imperfectly known — Peculiar arrangements — Churches at Zamora — Toro — Segovia — Pointed style — Cathedrals of Leon — Burgos — Toledo — Seville.

CHRONOLOGY.

	DATES.		DATES.
Gothic conquest—Athaulf	A.D. 411	Alphonso III.—conquest of Toledo	A.D. 1085
Moorish conquest	711	Conquest of Cordova	1226
Kingdoms of Navarre and Aragon established about	760	——— Valencia	1238
Sancho I., King of Castille	1005	——— Seville and Murcia	1243
Alphonso VI. unites all Northern Spain into one kingdom	1072	Ferdinand el Santo died	1252
Henry de Besançon—foundation of kingdom of Portugal	1095	Alonso el Sabio	1252–1284
		Pedro the Cruel	1350–1369
		Ferdinand and Isabella	1474–1516
		Conquest of Granada	1492

THE monuments of Gothic architecture in Spain are known to be numerous and splendid, and its history would be of surpassing interest; but beyond this the subject is almost unknown. With few exceptions we have no means of obtaining even the most elementary notions regarding the dates and styles of the noble mediæval cathedrals of this land.[1]

[1] A large amount of valuable matter on the subject is contained in the España Sagrada and the works of Pons and Cean Bermudez. But these works are unaccompanied by drawings, and consequently not available for the purposes of exact examination and description. The later writers who have touched upon the subject are Roberts and Villa Amil. The former, however, is far too incorrect a sketcher, and too studious of picturesque effect at the expense of truth and exactness, to be of use to any one desirous of data to reason upon. The latter is more correct, and with a nicer perception of the peculiarities of style has produced a work which, if accompanied by a few plans and architectural details, would go far to supply the deficiency complained of. Everything, however, has here again been sacrificed to the production of a splendid picture-book.

There is more information on the subject contained in Ford's Handbook of Spain than in any other work that has been published; but this is without illustrations, and the proportion of the book assigned to architecture is necessarily small. A good deal may be gleaned from the works of Wells, Widdrington, Hoskins, and other recent tourists, but it is of the most unsatisfactory class, as neither they nor any one else who has yet published on Spain were sufficiently instructed to pronounce on any of the disputed questions. Even the splendid work of Laborde adds very little to our knowledge of the subject, being almost confined to the Roman antiquities, while the Gothic were either despised or misunderstood.

With this almost total want of accurate and detailed descriptions, it is obvious that we cannot arrive at any of those minute peculiarities and finer shades of difference which give such value to the development of styles. There is the still greater danger that these particulars are liable to be mistaken and misstated from the want of sufficient data on which to found any correct deductions.

The great outlines of Spanish history are strongly marked and easily understood. From the Gothic king Athaulf (417) to the death of Roderick (714) Spain was under the dominion, more or less complete, of the Goths. No buildings are now known to exist which belong authentically to that age, but it must be supposed that a foundation of Gothic institutions and a mixture of Gothic blood was the result of this long dominion; and these elements showed themselves most distinctly in Spanish history and art in all subsequent ages. With the Moorish conquest in the beginning of the 8th century the architectural history of the country divides itself into two separate and distinct branches. The one fixed its head-quarters at Cordova and afterwards in Granada, where it remained unmixed during the whole period in which these cities were occupied by the Moors. It gradually spread itself north as far as the Pyrenees, losing, however, much of its purity as it extended farther, and easily and rapidly dying out on the first reverse of fortune that befel its brilliant inventors. The other, nursed in the rude cradle of rugged Asturias, maintained itself in Oviedo and Leon throughout the whole of the middle ages, and during the 11th century, when the tide of conquest began to roll back on the Moors, gradually extended itself to the south. In the southern provinces it imbibed much of the richness of the Moorish architecture which it was superseding, and gave rise to the style that may aptly be called Moresco, to denote a mixture of Saracenic with Gothic art, as we use the word Romanesque to designate a mixture of Roman with the styles imported or invented by the Barbarians.

The ebb and flow of these two great styles is strongly marked and easily traced, even with such imperfect information as is now available; but when we attempt to discriminate between the minor and provincial peculiarities of each, our knowledge is utterly at fault. We can just perceive that Spain, like France, is divided into several architectural provinces, as strongly marked and as distinctly bounded, but what these features and where these boundaries are, still remains to be determined. One remark only can be made here, which is, that in Gothic architecture Aragon and Navarre, with Catalonia and a great part of Valencia, appear to rank with Gascony, Rouergue, and Roussillon. In fact, in the middle ages, the Pyrenees, to use the expression of Louis XIV., did not exist.

This style common to the two countries appears to extend farther into Spain than into France. Leon and Gallicia stand apart from this and from the rest; the Castilles had a distinct style of their own, and south of these the Moorish element predominates to such an extent, and tinctures everything so completely, as to form an easily distinguished province by itself.

With a felicity of nomenclature unknown in other countries, the Spaniards call their earlier round-arched buildings *Gothic*, "obras de los Godos," which they certainly were, the name being always far more applicable to the round-arched than to the pointed style. The latter they call "Tudesco," or Teutonic, an equally appropriate name with them, as, singular though it may at first appear, they borrowed the style from Germany, and not from the fountain-head of France.

In a former chapter it was shown with what difficulty the Frankish architects forced their style on the southern or Romance Provinces of France, how unwillingly it was received there, and how little its principles were ever understood by that conquered but unamalgamated people. The sword of Simon de Montfort and his fellow crusaders, and the dungeon and stake of the Inquisitors, who were left to complete at leisure the pious work, did accomplish an outward conformity. But their influence and teaching never extended beyond the Pyrenees. Thus the hatred caused by the very success of the Franks formed a barrier which added to the innate repulsion between them and the Spaniards, and effectually prevented the style from penetrating in that quarter.

On the contrary, a constant communication, aided by affinity of race, was kept up through Lombardy between the Goths of Spain and those of Germany, and, paradoxical though it may at first sight appear, it is nevertheless true that the pointed style progressed from Paris to Tournay and Cologne, thence up the valley of the Rhine to that of the Po, and so on to Barcelona and Burgos, thus almost making the tour of Europe instead of following the shorter and what might seem the natural route. In later years we see these same countries peacefully united under Charles V., though the power of Louis XIV. could not unite France and Spain, so repugnant are the natures of the two races one to the other.

An ethnologist will miss in the above enumeration of styles and races all mention of the Phœnicians and Iberians, who, before the Roman torrent swept over Europe, occupied in the Peninsula the same relative positions as the Moors and Goths did in the middle ages. Some influence they certainly had, but I fear it is impossible to trace it architecturally, as the Phœnicians never were a building race; and while no monumental traces of their power remain at Tyre, Sidon, or Carthage, such are not to be expected in the imperfectly-known Peninsula, where, too, they were much less firmly established. The Iberians, on the other hand, seem to have been complete savages, who never built nor could build; and their influence consequently has been very slight on the arts of their country.

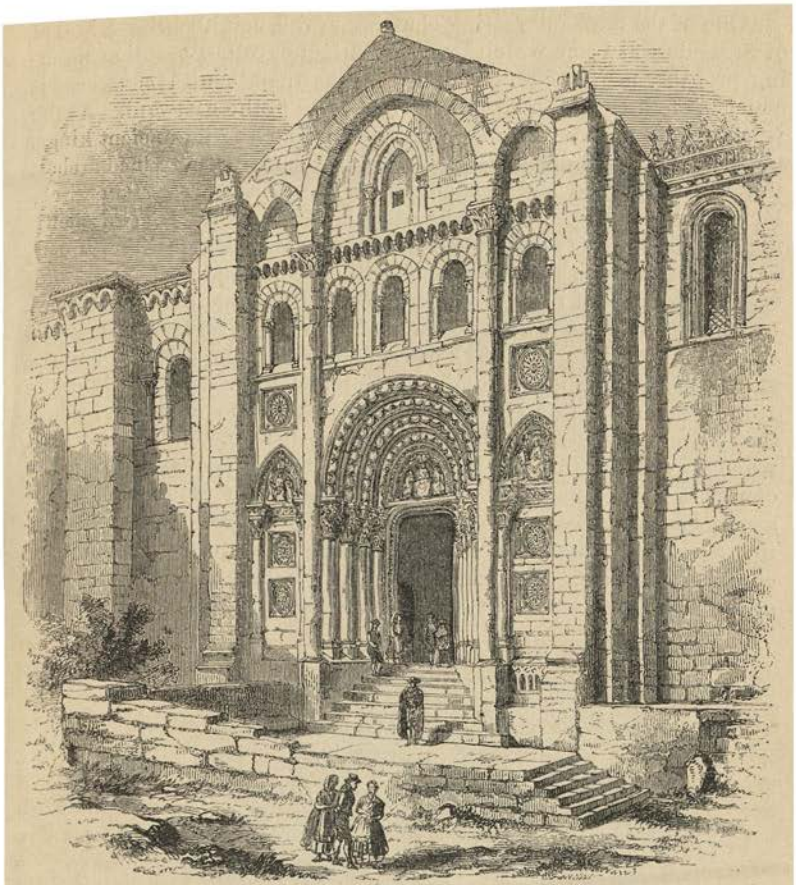
Till some accurate plans of Spanish churches are published, it is impossible to understand either what their general arrangements are or whence derived. The only one which I possess or ever saw of one of their first-class cathedrals is that of Seville, and unfortunately it is, for the purposes of history, the least interesting of any, inasmuch as, being built on the foundations and in the exact form of the mosque it replaced, it is no index to the usual arrangement of Christian

buildings. From descriptions and views we gather that all the older and smaller churches possess the usual semicircular apse, while the cathedrals and larger churches display the chevet arrangement. The latter is either the complete French chevet with its circlet of chapels, or what may be called the German chevet, an aisle bent round behind the high altar with one eastern chapel. If the eastern end of the church is rectangular, this is a lady chapel; if circular or octangular, as at Burgos and Batalha, a tomb-house. All the larger churches have transepts, but they seldom project beyond the side aisles, and at their intersection with the nave there always is a dome or raised part of the roof, marked externally by a low tower or projection of some sort. The Spanish architects apply the name *Cimborio* to this feature, and as it is peculiar and local in its form, it may be well to retain this appellation in speaking of it in future.

The nave has always side-aisles and sometimes chapels. The principal entrance is invariably at the west end, and generally flanked with towers. All these characteristics are common to all churches on both sides of the Pyrenees, and therefore cannot be considered as exclusively belonging to Spanish churches. The arrangement of their choirs, however, is, I believe, peculiar, at least as we find choirs now, though it is by no means clear that in ancient times this arrangement was not more common.

Instead of placing the principal entrance of the choir at the west end, as in France and England, the Spaniards erected in the middle of their churches something like an internal double apse German church, entering it, as in Germany, on the north and south sides opposite the transept doors, which thus, it must be confessed, acquired a meaning which we miss in the more common arrangement. Thus, instead of having the space east of the transept large enough to contain the high altar, and the stalls of the clergy and choir, they made it generally only one or two bays in depth, containing merely the high altar, with a screen on each side. The space in the centre of the transepts and under the *cimborio* is unoccupied, and screened off by railings (cancelli); and the whole choir, with the stalls of the officiating clergy, is to the westward of the intersection. Whether intentionally or not, Westminster Abbey is now arranged according to this plan, and if the western door of the choir were blocked up, would exactly represent a Spanish cathedral.

It is not difficult to see that this arrangement is derived directly from that of the Roman basilica. Turning, for instance, to the plan of St. Clemente (woodcut No. 365), the choir is seen to project exactly in the same manner into the nave. When there were transepts, there was an open space in front of the cancelli of the high altar. The difference was, that the enclosure of the choir in the basilicas was only a low wall, 3 or 4 ft. high, which did not impede the view of the high altar. In Spain it is sufficiently lofty to afford a back to the high canopied stalls, which in all Gothic cathedrals form the seats of the higher clergy. In consequence it not only hides the high altar from the principal entrance, but is a most unmeaning interruption to the



659. Cathedral at Zamora. From Villa Amil.

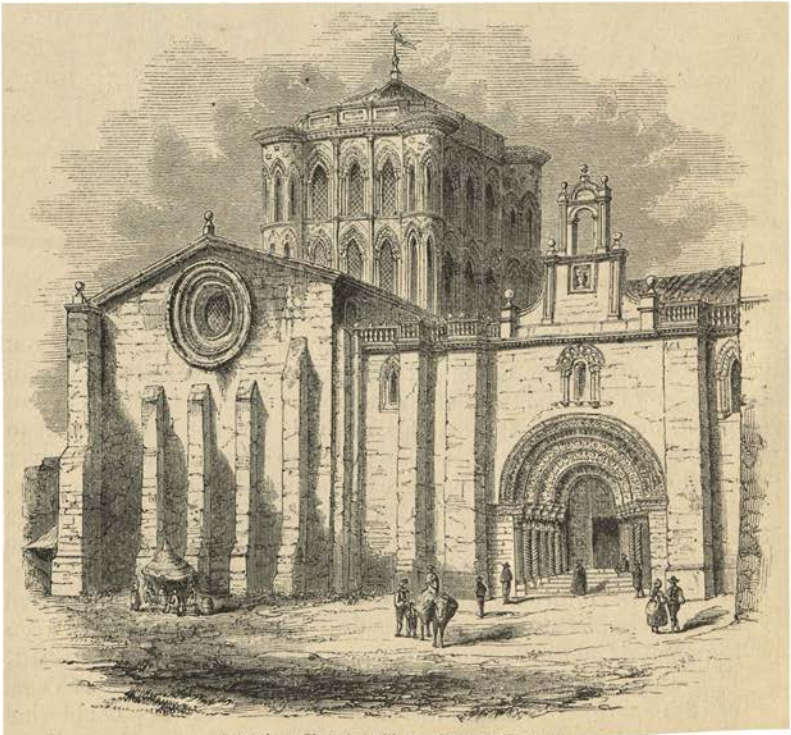
general ordinance of the church. It is evidently an architectural absurdity on entering the principal doorway to see nothing before you but a dead wall, and to be obliged to turn into the side aisles to obtain an entrance to the sanctuary of the temple. The transepts, as before remarked, derive benefit from this method, but not to the extent to which the principal entrance loses; for no side entrance can ever replace the dignity of one opposite to the principal object in the temple.

Some minor arrangements, which are peculiar, will be noted in the sequel; but this is so important, that without pointing it out in the first instance it would be impossible to understand what follows.

Of the older churches, all that we know are in the neighbourhood of Oviedo. One of these, Sta. Maria de Naranco, is said to have been built in the 8th century; another, San Miguel de Lino, 850; a third, S. Julian, about the same time; and a fourth, Nuestra Señora de la Vega, in the 12th century. Besides these, there can hardly be a doubt that many other similar churches are scattered through the Asturian valleys.

One of the most interesting churches in this neighbourhood is that of St. Isidoro at Leon, which Capt. Widdrington calls Byzantine, meaning probably merely circular arched. Like the Rhenish churches, it consists of three aisles, terminating in apses to the eastward. At the west end is the Pantheon, or place of burial of the ancient kings. Capt. Widdrington describes it as "low and dark, with groined arches, the ceiling painted and ornamented in a style so purely and entirely Byzantine, that beyond doubt the artists must have come from Constantinople." There are two entrances, apparently lateral, richly sculptured, and other peculiarities, which render this one at least of the most interesting churches of its age, which seems to be about the 11th century.

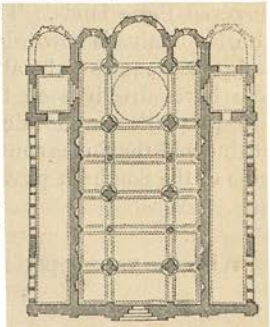
At Zamora there is a cathedral, part of which (probably the walls shown in woodcut No. 659) dates from the same period; but the great portal, though still retaining the round arch, is evidently of the 12th, if not of the 13th century; for here, as in the South of France, the natives adhered to the old form with a pertinacity rather startling, when we consider that the Moors had used the pointed arch for many centuries before that time. Another church, the Madelaine, in the same city, possesses a noble lateral doorway of the 11th or 12th century, and both internally and externally is less altered than most churches of its age. The vault of the choir is the pointed tunnel-vault of the South, and is mixed with round forms and semi-Moorish details



660. Collegiate Church at Toro. From Villa Amil.

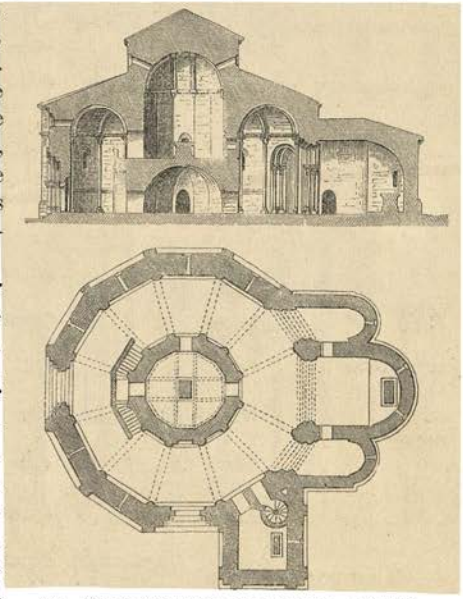
in a manner more picturesque than beautiful. Externally, these peculiarities are better shown in the Collegiate Church at Toro (woodcut No. 660), which displays the rich lateral doorway of this age, and introduces us to the tower-like domes (*cimborio*), half Moorish, half Gothic, which are so characteristic of the style.

All these churches, and as far as descriptions are intelligible, almost all those erected before the 13th century, had their principal entrances at the side; and if they had not the double apse of the Germans, they had at least sometimes a tomb or baptistery at their west ends. If this was the general rule, as appears to have been the case, it is easy to understand how the Spaniards came to separate the choir from the high altar, and make the lateral entrances into it as they did.



661. St. Millan, Segovia. From Gailhabaud. Scale 100 ft. to 1 in.

The plans of two other churches have recently been published in France by M. Gailhabaud; one, that of St. Millan (woodcut No. 661), served originally as cathedral for Segovia before the building of the present one, commenced in 1525. Though small, it is interesting for the peculiarities of its structure, having no windows but those at the west end, and some very small ones at the east. It must have been a very dark and gloomy edifice even without painted glass, and in the bright climate of Spain. It possesses lateral galleries, common in this part of Spain, and found also in Germany. These are no doubt the lineal descendants of the peristyles of the Romans, and the precursors of the cloisters — or peristyles turned inwards—that superseded them everywhere.



662. Church of the Templars at Segovia. No scale.

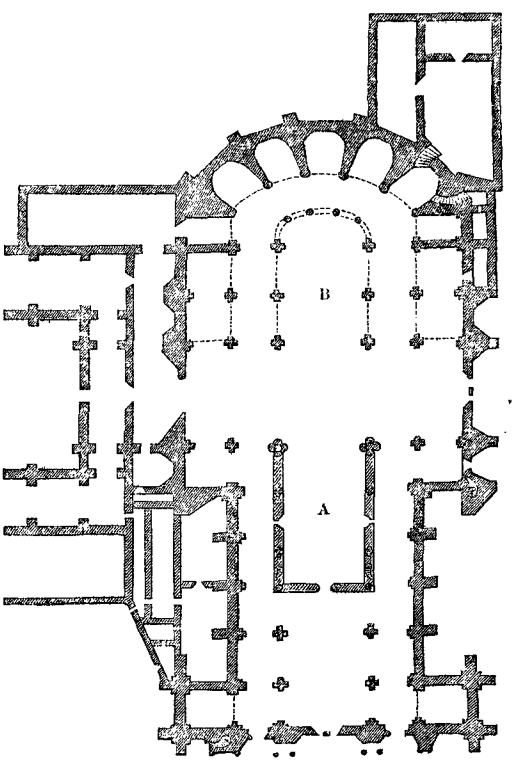
The other is a circular church of the Templars, one of the few of that form found in Spain, copied no doubt from the church of the Holy Sepulchre at Jerusalem. Though its date is 1204, it hardly shows a trace of the pointed arch internally. Its doorway is pointed and ornamented with the billet moulding, which would date fifty years earlier in England, and nearly a century before that period in France. Its

internal arrangement is peculiar, having a raised tomb or vault in the centre; and altogether it looks much more as if it were copied from the Dome of the Rock than from the church now known as the Sepulchre at Jerusalem.

This is a meagre account of a great style; but the Romanesque styles of the South of France have been described above purposely at considerable length, because of their prevalence over the whole district from Arles and Avignon to Zamora and Segovia. These styles were gradually elaborated from Roman architecture, specimens of which covered these lands. That part of them found on the French side of the Mountains is now tolerably known; though to complete our knowledge we require to be able to compare them with the Spanish branch. We have already seen that the latter was characterised by a stronger affinity with the Gothic style which appeared on the banks of the Rhine and the Po, as contradistinguished from the Romanesque tendencies of the Southern provinces of France.

Pointed Style.

With the very imperfect materials at our command it is impossible to say, with anything like confidence, when the pointed style was introduced into Spain. It is almost quite certain that the Saracens used the pointed arch in that country as early at least as the 10th century, though, as before remarked, they always in Spain preferred the Roman circular shape, but stilted so as to get the same elevation which the broken arch gave.



663. Cathedral of Leon. From Ponz ('Viage'). No scale.

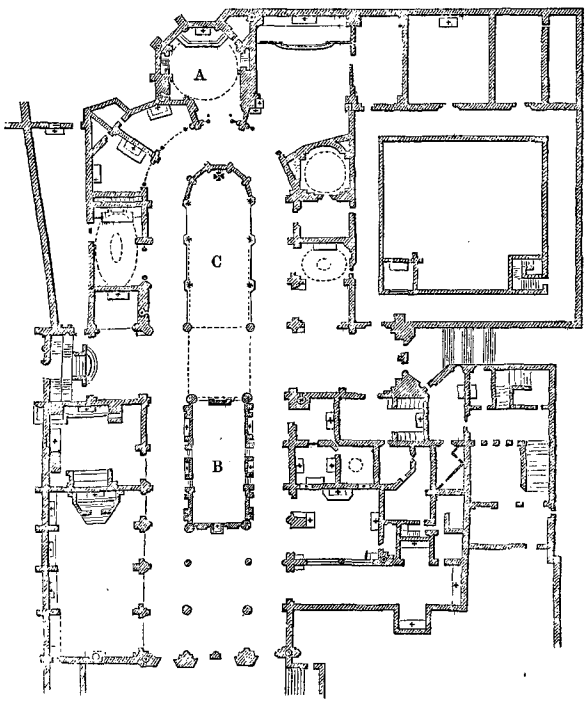
It is also evident that in the 11th century, if not before, the pointed vault and constructive arch of the South of France were also used on this side of the Pyrenees; but neither of these belong to the pointed Gothic *style*, of which I am not aware of any example earlier than the reign of Ferdinand the Saint (1217). The cathedral

of Leon, or some part of it, may be a little older, and Capt. Widdrington seems to say that he is able to prove that French and German architects were employed by the kings of Leon: if so, the cathedral must have been the work of a Frenchman, as it is a regular chevet church, commenced in 1199, though the greater part of the superstructure is of a much later date. Were it not for the disfigurements of modern times, this would be one of the most beautiful cathedrals in Spain: "proverbially," says Ford, "it is one of the most graceful and elegant in the world." Capt. Widdrington gives the preference to its neighbour of Oviedo, which he says is the most beautiful of all the cathedrals of Spain, although in scale it must yield to many of them.

Although the plan here given (woodcut No. 663) from Ponz ('Viage') is not quite to be depended upon, it explains so fully the position of the choir (A) and *capilla maior*—or chapel of the High Altar (B)—in Spanish cathedrals, that it is worth quoting.

This building differs from a French cathedral of the same date mainly in the greater importance of the parts to the west of the transept, and of the lateral entrances.

The cathedral of Burgos (woodcut No. 664) has been better illustrated than that of Leon, and being on the high road of all travellers, has been frequently sketched, but not measured, which is the more to be regretted, as it is probably the most characteristic cathedral in all Spain, presenting both internally and externally all the peculiarities of the style more perfectly than any other.



664. Cathedral at Burgos. From Ponz. No scale.

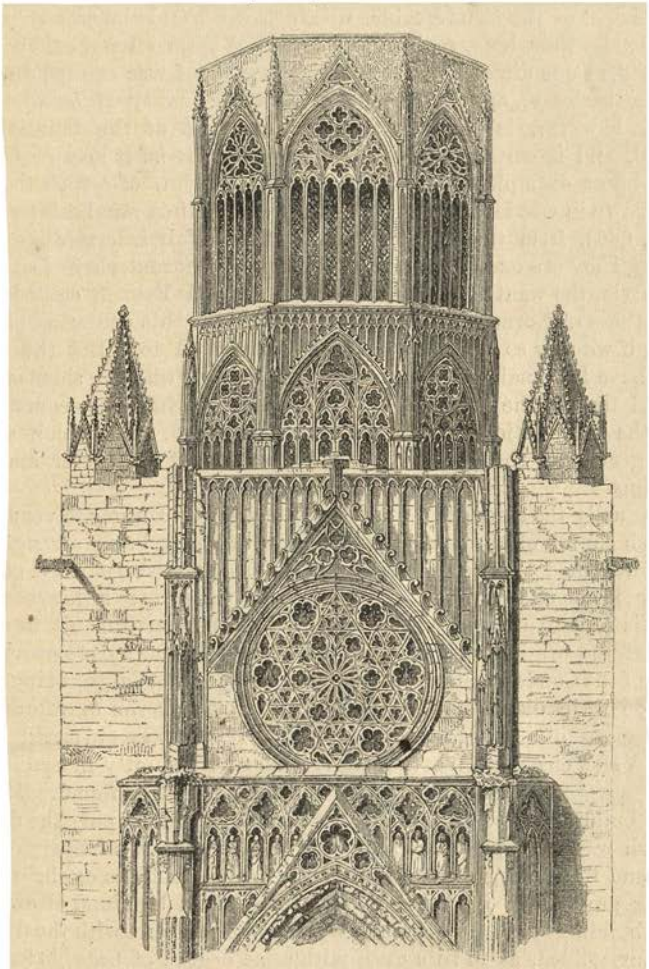
It was founded in the reign of St. Ferdinand, about the year 1221, and the greater part of the east end and body of the church belongs to the early part of the 13th century. The west front (woodcut No. 665) was added two centuries afterwards, the capilla *condestable*

(A)—so called from having been erected as the burying place of the Velasco family, hereditary constables of Castille—at the very end of

665. West Front of Burgos Cathedral. From Chapuy, Moyen Age Monumental.

the 15th; and the cimborio was not completed till 1567, the older one having fallen down in 1539. This long range of dates causes of course some incongruities of style, but without impairing the general effect. The varied richness of the outline is unrivalled by that of any French

or German cathedral, and matched only by some of our own English examples. The western façade is a German importation, having been erected by two masons from Cologne, who carried out in a foreign land the design which their countrymen were unable to complete in the land of its invention. It is in fact, with the exception perhaps of the cathedral of Berne, the only design of this class that has been completed



65. Cimborio of Cathedral at Valencia.

with the two open-work spires; and though the dimensions are small, the height being only 280 ft., the effect is remarkably good. Before the removal in the last century of the deeply recessed and sculptured portals, this façade must have been one of the most beautiful compositions in existence. From its late date, there are of course some impurities of style; but to compensate for this, there is a richness of fancy

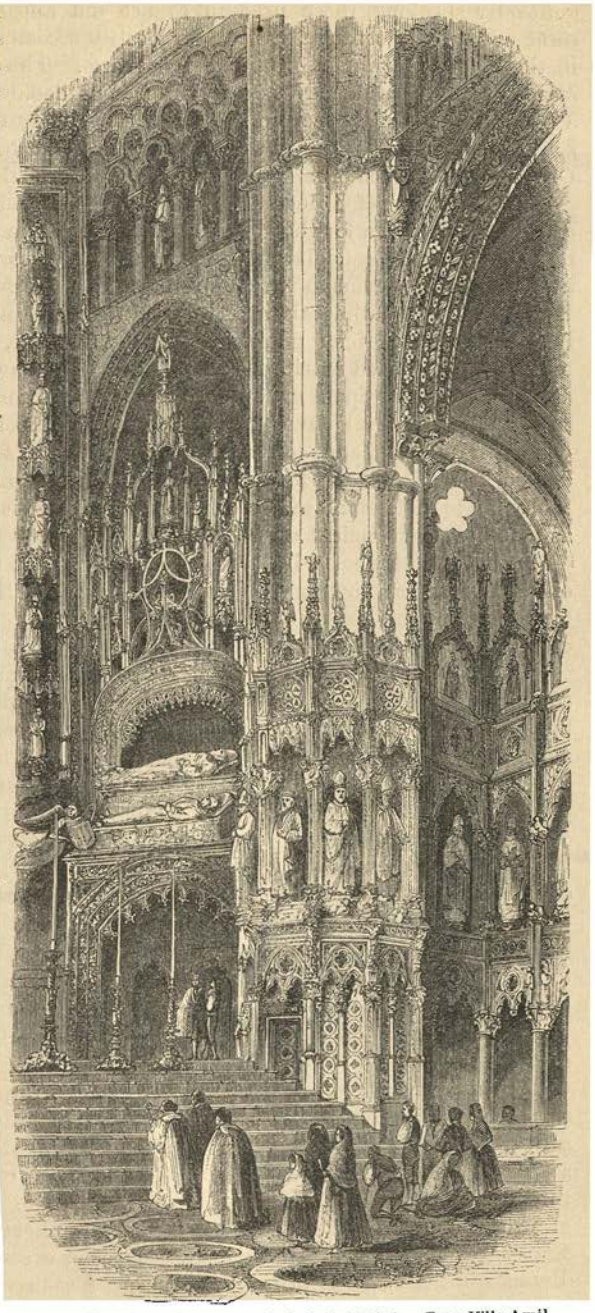
and a half Oriental exuberance of design that more than redeem it, and make it altogether, perhaps, a more beautiful thing than its gigantic rival on the Rhine will ever be, with all its cold perfection of masonry. The height of the towers is said to be equal to the length of the building. They would thus have a tendency to overpower the rest, were it not for the central octagon, and still more for the great octagonal structure of the chapel of the Condestable, which rises beyond the eastern apse and balances the whole, making the cathedral appear longer than any other of the same dimensions. The cimborio itself was erected in the reign of Charles V., and cannot boast of much beauty of detail. Its outline, however, is probably copied from that of the building it replaced, and is certainly singularly happy: as it is, it may be taken as the latest example of a favourite Spanish form, of which that at Toro, shown in woodcut No. 660, is one of the earliest; and this (woodcut No. 666), from the cathedral at Valencia, a fair intermediate specimen. They are one of the most striking and characteristic features of the style, the want of which is much felt in all French cathedrals, except those of Normandy, where, as in England, this centering of the design, if we may so call it, was carefully attended to. But the cimborios have less analogy to the central spires used on both sides of the Channel than to the domes which in Italy and Germany so commonly mark the intersection of the nave and transepts, and which afterwards grew into the great Renaissance domes of St. Peter and its imitations.

Internally the arrangement of the cathedral of Burgos is very like a French church of the same age, the choir (B) only being arranged in the Spanish mode. The capilla maior (C), or the part eastward of the transept, is longer in proportion than is usually the case in this country, and it is now so overgrown with chapels that it is difficult to make out what the original design was. Of these last the most remarkable is that of the Condestable alluded to above. It is not large, being only about 45 ft. in diameter, but nothing can exceed the extraordinary elaborateness of its decorations. In this respect it surpasses even Henry VII.'s chapel at Westminster. Indeed it is only in Spain that perfect *abandon* as regards expense and finish is to be found. If any Gothic building exists of equal richness, it is Roslin chapel; the design of which was most probably imported from this part of Spain, every detail and form being easily traced back to the Castilles or the neighbouring provinces. Better taste, it is true, might be found elsewhere, but in buildings of so late an age we must be content with the display of labour, guided, as in this case, with some degree of taste, before the invasion of vulgarity which took its place in the succeeding century.

A similar chapel to this is attached to the cathedral of Murcia, called the Capilla Marchese. Internally this is as rich and nearly as beautiful as that at Burgos, though its external outline is very inferior. The most splendid specimen of its class, however, is that which Emanuel the Fortunate commenced as a burying place for himself behind the altar of the church at Batalha, of which more hereafter.

The cathedral of Toledo was commenced about the same time as that

of Burgos, but on a larger scale, being, with the exception of Seville, the largest of Spanish mediæval cathedrals. Its internal dimensions are:—"Length, including a moderately sized chapel at the eastern end, 350 ft.; width throughout, 174 ft.; height of principal nave and transept 120 ft. The width is divided into 5 aisles, those on the outside rising to about two-thirds the height of those next the centre, and these to about one-half the central aisle."[1] Its arrangement in plan is apparently almost identical with that of Troyes cathedral (woodcut No. 551), but its dimensions are somewhat less. Its details are,



667. View in the Choir of the Cathedral at Toledo. From Villa Amil.

[1] Wells, Picturesque Antiquities of Spain, p. 128, whose dimensions I have followed in preference to those of Ponz, quoted by Ford, as more consistent with each other, and with probability.

generally speaking, those used in France and England in the beginning of the 13th century, though its locality occasionally shows itself in the Moorish character of some of its parts. The triforium for instance seen in woodcut No. 667 is throughout decidedly Moresco, and a practised eye will detect on every side a tendency to depart from the sober constructive rules of the pure Gothic, and to give rein to an Oriental exuberance of fancy which is so typical of the style.

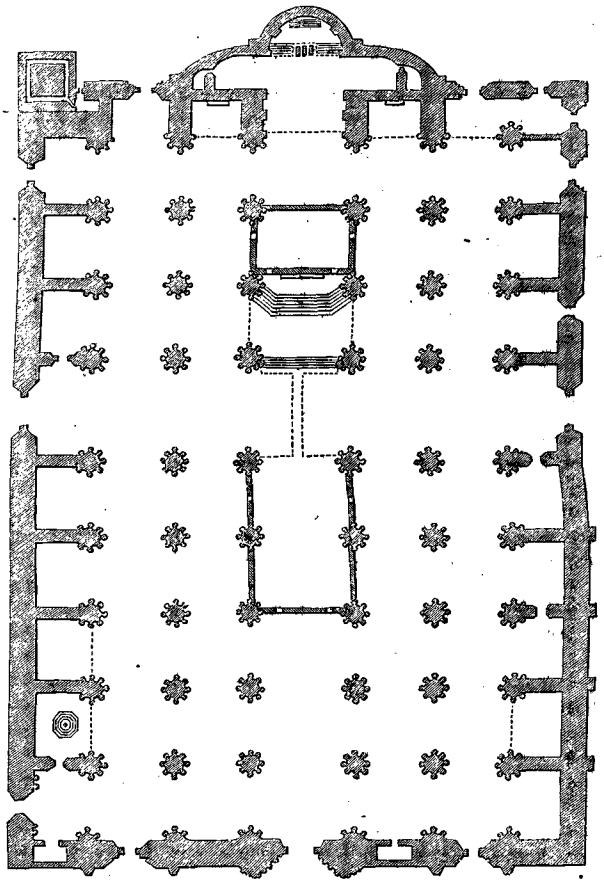
The cathedral of Toledo is even more remarkable for the richness of its furniture than for that of its architecture. The altars, the screens of the tombs, the candelabra, the paintings on glass and canvas, make up a mass of ornament to which no parallel is to be found in France or England. Many cathedrals in these countries may once have possessed furniture equally rich; but spoliation and neglect, and, worse than either, the so-called spirit of improvement, have swept most of this away, and it is in Spain only that we are carried into the bodily presence of a mediæval church. Even Toledo has been sadly disfigured with whitewash; and neglect and poverty are fast fulfilling the destructive mission of the age. Still enough remains to enable the architect to understand and re-create the glorious vision of a cathedral as it appeared in ancient days.

Externally this cathedral is very inferior to that at Burgos. Only one of its western towers has been completed, and this not in the best taste. Its cimborio is unimportant, and there is no towering eastern capilla to carry the eye beyond the precincts of the church itself.

The cathedral of Seville, the largest and grandest ecclesiastical edifice in Spain, is an exact counterpart of that of Milan. It is not known who its architect was, but he must have been a foreigner, and most probably a German, as no Spaniard, especially in the south, could have restrained his fancy to the comparative purity of its forms. Its plan is very peculiar, owing to its having been built in the form and of the exact dimensions of a mosque which stood on the spot till 1401. It was then pulled down to make way for the cathedral, which was completed 118 years afterwards. Its form is a parallelogram of about 372 ft. by 270, covering therefore, as near as may be, 100,000 square feet, exclusive of the royal sepulchral chapel—a cinque-cento addition to the eastern end. With this, its area is nearly identical with that of Milan, and it betrays in all its parts the same want of knowledge of the true principles of Gothic design. Notwithstanding all this, it is so grand, so spacious, and so richly furnished, that it is almost impossible to criticise when the result is so splendid and imposing. The effect of its exterior is even worse than that of Toledo, and but for the magnificent Moorish Giralda, represented above (woodcut No. 361), that stands at its north-eastern corner, it would scarcely possess a single remarkable external feature.

The central aisles of the nave and transept are each 56 ft. wide from centre to centre of the pillars; the side aisles are 40 ft.; so that the distance of the diagonal pillars of each square compartment of the side aisles is exactly equal to the width of the central nave. It thus happens that if the 4 central pillars at the intersection of the nave and

transept were left out, the 8 next would form a perfect octagon. As was remarked in speaking of Jaina temples (p. 77), this, which is the proportion always used in them, is pleasing for buildings which have roofs of the same height, but is not sufficient where the roof of one aisle is higher than that of another;[1] and though the difference in height is in about the same ratio here, this is not sufficient for contrast,



668. Plan of Cathedral at Seville. Scale 100 ft. to 1 in.

and all the pillars being of the same thickness and of the same design, there is too great uniformity of dimensions and a want of subordination of parts which prevents this church from looking so large as it really is.

It would be impossible to render the architecture of the remaining cathedrals of Spain intelligible without a mass of illustration which is not available. Some of these, however, are well worthy the attention

[1] I am not aware of this proportion having been used in any other Gothic church of importance.

of artists, besides their historical importance. That of Santiago, for instance, though entirely modernised externally, still retains in the interior many of the features of a church of the 12th century, and is remarkable for the bold, massive appearance of strength which characterised that age. The same may be said of the cathedral of Cuenca, a building of the same period, with a simple circular apse, and a certain amount of Moorish detail and feeling which was sure to mark its more southern locality. Those at Tarragona and Barcelona are both remarkable buildings. The latter especially, commenced in 1298, is the typical example of the Catalonian style. So far as we have means of judging, it seems to have been a failure as a Gothic design, though displaying considerable grandeur.

Salamanca possesses two cathedrals, one commenced in 1102, simple and massive, half a fortress; the other begun in 1513, a florid specimen of the last age of Gothic art, just before changing into the Renaissance. So too at Segovia: the old cathedral has already been spoken of (p. 823); the new, begun in 1525, on the model of that of Salamanca, shows the style in its last age. The old cathedral of Saragoza (the Seo) is somewhat older, probably of the 15th century, and a fair specimen of the Spanish style of that age, perhaps not much inferior to the contemporary styles in the north of Europe, but still a sad falling off from the purer Gothic that preceded it.

The gem of this age is the church of St. Juan de los Reyes at Toledo, erected by Ferdinand and Isabella, and ornamented with all the lavish exuberance which the wealth of the New World could supply in aid of the earnest bigotry of its royal founders. It is to the Spanish style what Henry VII.'s Chapel is to the English, or the Eglise de Brou to the French, surpassing both in richness of detail, but, like them, depending far more on ornament than on design for its effect.

Some parts of the church of San Miguel at Xeres exceed even this in richness and elaborateness of ornament, and surpass anything found in Northern cathedrals, unless it is the tabernacle-work of some tombs, or the screens of some chapels. In these it is always applied to some small and merely ornamental parts. In Spain it frequently is spread over a whole church, and, as in this instance, what in a mere subordinate detail would be beautiful, on such a scale becomes fatiguing, and is decidedly in very bad taste.

Slightly subsequent to these are the cathedrals of Granada and Jaen, where the features of the Gothic style are so blended with those of the so-called Revival, that it would be easy to claim them for either class. In every other country of Europe at this age the Reformation had stopped church-building altogether, even in those countries which remained Catholic, except in Italy, and there the revived classical style had wholly superseded the Gothic. The case, however, was widely different in Spain. Here the old faith was never shaken. The country had but lately become, by the marriage of Ferdinand and Isabella, for the first time a united monarchy. In their reign the discovery of Columbus had opened to Spain a new world and the most brilliant

prospects. The final expulsion of the Moors had thrown into the hands of the Church unbounded wealth and power, and at the same time inspired it with the zeal which has ever prompted the expenditure of such wealth on monuments for public use before it became absorbed in individual selfishness. All these causes made this the great cathedral-building age of Spain, and had the Spaniards designed with the bold simplicity of their forefathers, the money then spent would have covered the land with the noblest buildings Europe could boast of. But the spirit of former times was past, and the expenditure was frittered away on carved ornaments of most elaborate minuteness, and on details which are mere proofs of wealth and degraded taste. These characteristics are peculiar to Spain, where alone this transitional style can be studied with completeness or advantage. Notwithstanding its defects, it is, it must be confessed, a fascinating display of brilliant littleness, the best of its kind, and in its prettiness often making us forget that there is something better and higher which neither wealth nor power can command unless combined with the simplicity of true greatness.

CHAPTER II.

SPAIN AND PORTUGAL.

CONTENTS.

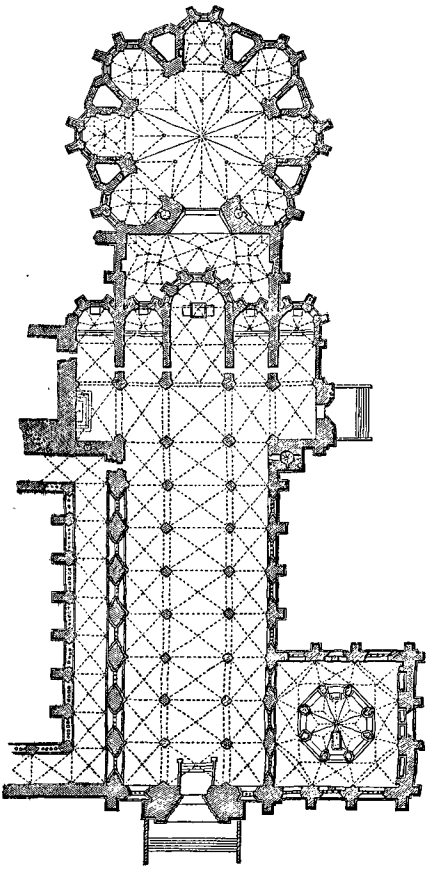
Portugal — Church of Batalha — Cloisters — Castles — Moresco style — Towers.

So little attention has been paid to the subject of Gothic architecture in Portugal, that it is by no means clear whether it contains any churches of interest belonging to that style. There are certainly some remains at Belem near Lisbon, and some fragments at least elsewhere; but those who have described them are so little qualified for the task by previous study, that it is impossible to place reliance on the correctness of their assertions regarding them. One church, however, that at Batalha, has met with a different fate, and having arrested the attention of Mr. Murphy, "the illustrator of the Alhambra," was drawn and published by him in a splendid folio work at the end of the last century. As might be supposed from the date of this work, the illustrations do not quite meet the exigencies of modern science, but it is at all events by far the best illustrated church in the Peninsula. It seems in some respects to be worthy of the distinction, being probably the finest church in the kingdom.

It was erected by King John of Portugal, in fulfilment of a vow made during a battle with his namesake of Spain in the year 1385, and completed in all essentials in a very short period of time. From the plan (woodcut No. 669) it will be seen that the form of the original church is that of an Italian basilica—a three-aisled nave ending in a transept with five chapels; the whole length internally being 264 ft., the width of the nave 72 ft. 4 in. It is therefore a small building compared with most of the Gothic churches hitherto described. To the right of the entrance, under an octagonal canopy which once supported a German open-work spire, are the tombs of the founder and of his wife Philippa, daughter of John of Gaunt; beyond this the octagon expands into a square, in a very Eastern fashion, to accommodate the tombs of other members of the royal family who are buried around. The whole design of this part is one of the most suitable for a family sepulchre to be found anywhere. The wonder, however, of the Batalha, or rather what would have been so had it been completed, is the tomb-house which Emanuel the Fortunate commenced for himself to the eastward of the church. Similar chapels at Burgos and Murcia have already been noticed, but this was to have surpassed them all, and if completed would have been the most gorgeous mausoleum erected during the middle ages.

It is curious to observe how the tradition of the circular tomb-house behind the altar remained constant in remote provinces to the latest age. The plan of this church is virtually that of St. Benigne at Dijon, of St. Martin at Tours, and of other churches in Aquitania.[1] It is easy to see how by removing the intermediate walls this basilica would become a chevet church, complete except for the difference in the span of the two parts of the building. Had the mausoleum been finished, something of that sort would probably have been done.

The plan of this tomb-house is interesting as being that of the largest Gothic dome attempted, and shows how happily the Gothic forms adapt themselves to this purpose, and how easily any amount of abutment may be obtained in this style with the utmost degree of lightness and the most admirable play of perspective; indeed no constructive difficulties intervene to prevent this dome having been twice its present diameter (65 ft.); and had it been so, it would have far surpassed Sta. Maria del Fiore and all the pseudo-classical arrangements that have since disfigured the fair face of Europe.



669. Plan of the Church at Batalha. From Murphy. Scale 100 ft. to 1 in.

Generally speaking, neither the proportions nor the details of this church are good; it was erected in a country where the principles of Gothic art were evidently misapprehended or unknown, and where a lavish amount of expenditure in carving and ornament was thought to be the best means of attaining beauty. The church from this cause may almost be considered a failure; its two sepulchral chapels being in fact by far the most interesting and beautiful parts of the structure. It is observable how much better the open-work spire agrees with the semi-Oriental decoration of the churches both of Burgos and Batalha than with the soberer forms

[1] See Part II., Book III., Chap. II., particularly woodcuts 494, 496.

of the more Northern style. One would almost be tempted to fancy that the Germans borrowed the idea from Spain rather than that the latter country imported it from the North. Till we know more of the age of the cathedrals of Leon, Oviedo, and other cities of the north of Spain, this point cannot be determined; but it seems by no means certain that such further knowledge will not compel the Germans to resign their claim to this their only alleged invention in the pointed style.

Next in importance to that at Batalha is the church at Alcobaça, commenced in the year 1148, and finished in 1222. It is a simple and grand Cistercian abbey-church, not unlike that at Pontigny (woodcut No. 558) in style. Its total length is 360 feet; its height about 64. The nave is divided from the side aisles by 12 piers, the arches of which support vaults of the same height over the three divisions—a circumstance which must detract considerably from the beauty of its proportions. The east end is terminated by a chevet (called by the Portuguese a *charola*) with 9 chapels.

The monastery which was attached to this church, and which was one of the most splendid in the world, was burnt by the French in their retreat from Portugal.

At Coimbra there are still some remains of Gothic churches; the principal of these is the old cathedral, which, though much destroyed, still retains many features belonging to the early part of the 12th century, when it was built.

In the same town is the church of Sta. Cruz, rebuilt by French architects in the year 1515, in the then fashionable flamboyant style of their country; and in complete contrast to this is the small but interesting Round Gothic church of St. Salvador, erected about the year 1169 A.D.

The other churches, such as those of Braga, Guimaraens, &c., seem to have been of late flamboyant style, and generally are so much modernised that the little beauty they ever possessed is concealed or destroyed by modern details.[1]

Cloisters.

As might be expected from the enormous wealth of the Spanish clergy, and the number of convents and establishments of that class, the country is rich in cloisters and in the usual monastic buildings that accompany them. The older cloisters are very similar in design to those of the south of France. That at Gerona is perhaps heavier and more massive than any found in that country; but that of the royal convent of the Huelgas, near Burgos (woodcut No. 670), is unrivalled for beauty both of detail and design, and is perhaps unsurpassed by anything of its age and style in any part of Europe. With

[1] On the whole, perhaps, the assertion contained in the 'Handbook of Portugal' is not exaggerated. It is there said that "no European country has less interesting ecclesiology than Portugal: there are certainly not 150 old churches in the kingdom; the French invasion, the great earthquake, and the rage for rebuilding in the 18th century have destroyed nearly all."

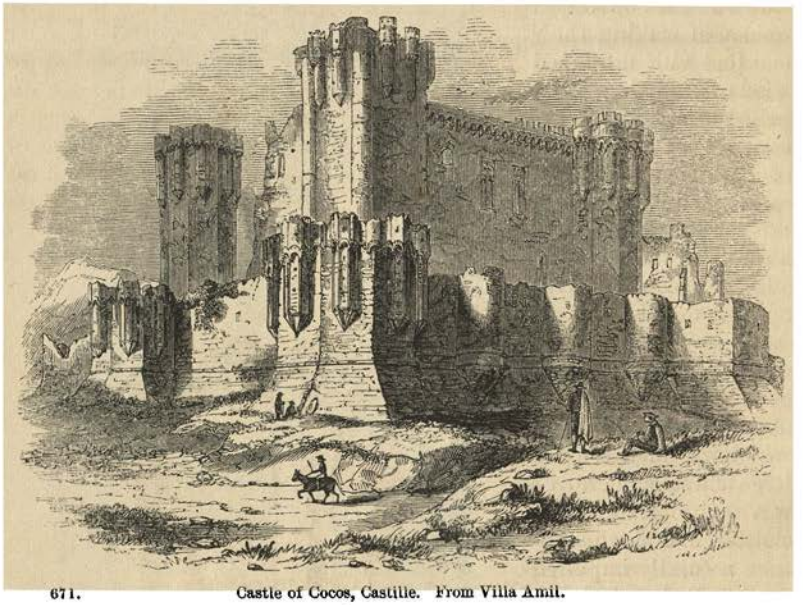
those of Germany, France, and Sicily, it makes up a series of arcaded alleys as exquisitely beautiful as are to be found in any other age or clime. In the 14th century the Spaniards adopted the universal fashion of making their cloisters with unglazed windows, being impelled to this by the necessities of the mode of vaulting which then came into use. Although this certainly appears to have been a mistake, still it accorded with Spanish details perhaps more happily than with those of any other country; for the rich abundance of ornament which was offensive in a large and solemn church was appropriate in a cloister, and as the climate naturally impelled the Spaniards to indulge in the luxury of deeply-shaded arcades, it is little wonder that we find them so successful in their treatment of this indispensable adjunct to a church of any consideration.

670. Cloister of the Huelgas, near Burgos. From Villa Amil.

The other parts of the monastic buildings are almost wholly unknown to us, either from the drawings of artists or the descriptions of travellers—a deficiency perhaps not wholly owing to neglect on their part, but in some measure to the circumstance of the monasteries and the cathedral closes having been occupied up to the present day. When this is the case, it is almost impossible but that they must have been modernised to suit the tastes and exigencies of successive times, and have lost in consequence all the grace and beauty they once possessed. Many fragments exist in the remoter parts of the country; and as they were the residences of the richest clergy of Europe, they cannot fail to reward the research of any careful inquirer.

Castles.

Though the cloisters have thus in most instances been modernised, it is not so with the castles, which have escaped alteration owing to



671. Castle of Cocos, Castille. From Villa Amil.

their use having passed away, while their greater solidity and strength have better enabled them to resist the effects of time. Many of them, with their tall towers and clustering turrets, still strike the traveller on the plains of Castille, and tell of a people differing essentially from those of all other nations of Europe, and no less so from those in the more southern and eastern regions of Spain itself.

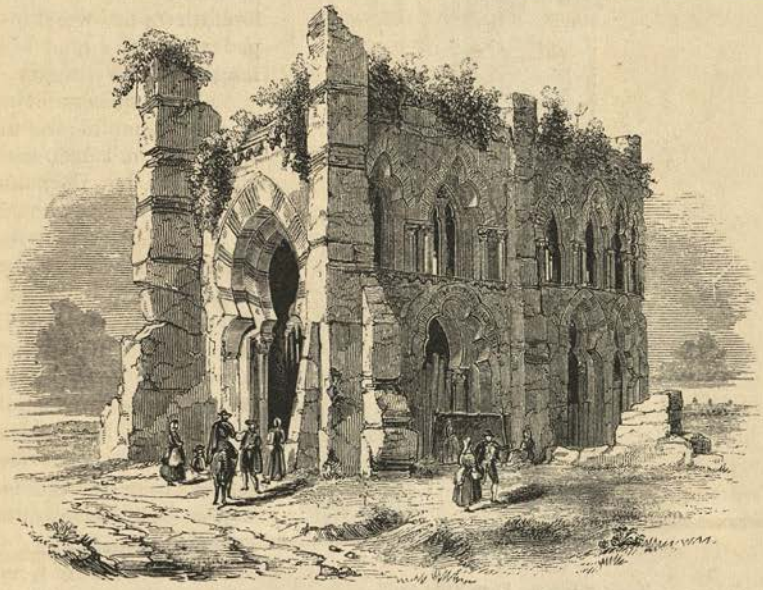
If we may judge by such drawings as we have, the castle of Cocos in Castille (woodcut No. 671) is one of the best preserved and most characteristic of those now remaining, and certainly is a fair specimen of its class, uniting in itself most of the features of the mixed style to which it belongs. The Alcazar at Segovia is another well-known and singularly picturesque castle, having the advantage of standing on a tall rocky base, to which it fits most artistically. Others might be selected, but such military examples hardly come sufficiently within the domain of architecture as a fine art to require further examination in such a work as this.

Moresco Style.

The history of the Moresco or Mozarabic style is quickly told and easily understood. It was impossible that a rude, half-civilized people like the Goths or Iberians of the north of Spain could come in contact with the polished and highly-civilized occupants of the southern portion

of the Peninsula without being captivated, as modern architects have been, with the elegant and beautiful style of architecture used by that people. These early mountaineers had only their own massive and intractable style—bold, vigorous, and picturesque, but singularly incapable of development without the introduction of some new principle to modify its form.

Had the Spaniards been influenced merely by local causes, there can be no doubt that they would have engrafted the Saracenic on their then round-arched style, and produced a Gothic, probably a pointed style, which would have been extremely different from that of the North; and had they been either an inventive or an architectural people, of which they never showed any symptom, the Spanish style

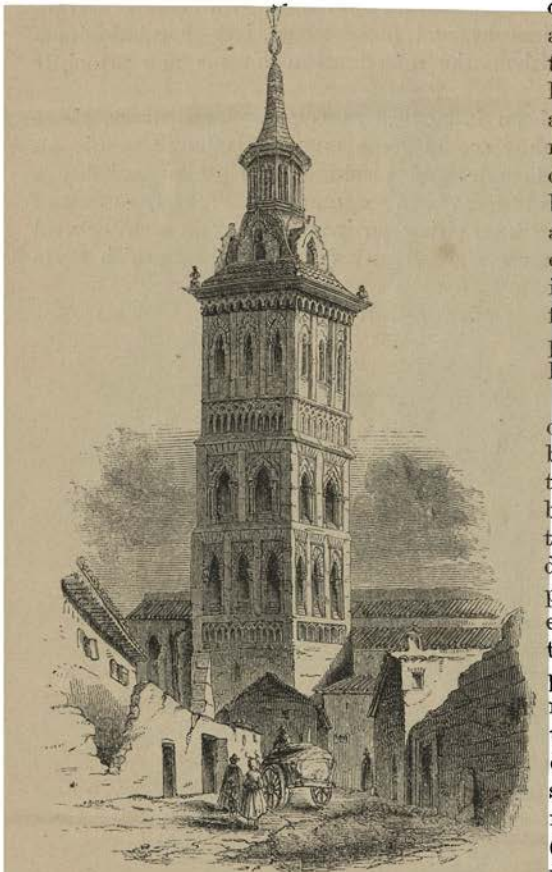


672 Chapel at Humanejos. From Villa Amil.

might have rivalled that of the North. A strong religious antipathy to the works of the infidels led them, in preference, to borrow from their Northern neighbours a style not peculiarly suited to their climate, and which they never perfectly understood. In some few and comparatively insignificant instances they adopted the native style, with only such slight modifications as were required for their purposes, and made out of it a mixture so picturesque, and so evidently capable of better things, that we cannot but regret the limited extent to which this adaptation was carried, productive as it was of much novelty and beauty.

The dates of all the specimens of this mixed style are so little known that it is by no means clear whether any which we now possess were erected by the Christians under the tolerant rule of the

Moslems, or whether they were all built at a later time by Moorish workmen under the Christian rule. All those with which I am acquainted were erected after the re-conquest by the Christians of the localities in which they are found; but this by no means contradicts, indeed rather favours, the belief that they were a continuation of other edifices of the same class in which they or their forefathers had worshipped when the land belonged to the stranger.



673. Tower at Ilescas. From Villa Amil.

The greater number of the examples are to be found in Toledo and the south, but they are by no means confined to that district, and indeed some of the most perfect are in the northern division of the country. One of the most picturesque, as well as most purely Moorish, of those that have been drawn is the little deserted chapel of Humanejos, in Estremadura (woodcut No. 672); and were it not for its form, which is essentially Christian, and the tracery in its windows, it might very well pass for a Saracenic ruin. The latter peculiarity not only assigns the building to a Christian origin, but if coeval, which it seems to be, fixes its date as not earlier than the 13th century.

Another example of the same class is the fragment that now remains of the once celebrated basilica of Sta. Leocadia, in the Vega, under the walls of Toledo. This certainly was not erected before the year 1130, when the church was first restored by Alphonso VI., immediately on his recovering the city; but we read of subsequent rebuildings down to 1300, and it is by no means improbable that this example may belong even to as late a date as that.

In the same city the church of St. Roman is built in the same style, and many others show fragments of Moorish architecture. Some of the chapels of the cathedral, which were certainly erected in the 13th

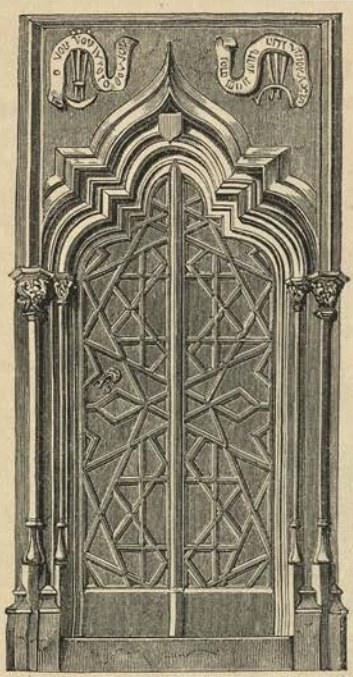
or 14th centuries, are so Moorish that many have been inclined to suppose them to have been fragments of the old mosque which the cathedral replaced. There is, however, no ground for such a supposition: they are undoubtedly of Christian origin; and though curiously blended, as in Sicily, with Saracenic features, their form betrays beyond a doubt the religion of their builders and their date. This is even more the case in a beautiful chapel in the monastery of the Huelgas, near Burgos, which, but for some Gothic foliage of the 14th century, introduced where it can hardly be observed, might easily pass for a fragment of the Alhambra. The same is true of many parts of the churches at Seville. That of La Feria, for instance, and the apse of the church of the Dominicans at Calatayud, are purely in this style, and most beautiful and elaborate specimens of their class.

674. St. Paul, Saragoza. From Villa Amil.

Perhaps the Christians adopted the light and elegant forms of the Moorish style principally in their towers, and frequently with a degree of beauty which their own Gothic style seldom surpassed. The tower of the church of Ilescas (woodcut No. 673), not far from Madrid, is a singularly elegant specimen, and will bear comparison with many of the best age of Gothic art. The tower and roof of the church of St. Paul at Saragoza (woodcut No. 674) are even more characteristic, for besides their form, they are covered with glazed tiles in all the brilliant hues of Tartar art, revealing the existence of that foreign element in this remote corner of Spain to an extent hardly suspected. The whole exterior of this church is indeed so foreign in its aspect that we might mistake the sketch for one taken in the Crimea or near the roots of the Caucasus, rather than in Catholic Spain.

The church of St. Thomé at Toledo has a tower so perfectly Moor-

ish in all its details, that but for its form it might as well be classed among the specimens of Moorish as of Mozarabic architecture.



675. Doorway from Valencia. From Chapuy.

Throughout Spain there are many of the same class, though undoubtedly erected by the Christians. In this country, as in Sicily, it is never safe to assume that because the style is Moorish, even purely so, the structure must belong to the time when they possessed the country, or to a happy interval, if any such existed, when a more than usually tolerant reign permitted them to erect edifices for themselves under the rule of the Christian conquerors.

Sometimes we find Moorish details mixed up with those of Gothic architecture in a manner unknown in any other country, as for instance in the doorway illustrated in woodcut No. 675, from the house of the Ablala at Valencia. The wood-work is of purely Moorish design, the stone-work of the bad unconstructive Gothic of the late Spanish architects, altogether making up a combination more picturesque than beautiful, at least in an architectural point of view.

In a more extended work it might be useful and instructive to follow this class of buildings further; for though they perhaps never rose to the dignity of a separate and independent style, this was one of those happy combinations which often lead to the greatest beauty. We have seen how the development of this style was prevented by the intolerance and bigotry of the people among whom it arose; but for this it might have produced an architecture more perfect in itself than either of the parent styles. But whether this would have been the case or not, it is certain that to this infusion of the Moorish art Spanish architecture owes anything it may have that is peculiar to it, or preferable to the Northern Gothic. As mere basilicas, these churches are certainly inferior to those of France; but the abundance of ornament, the delicacy of finish, and the poetic abandon that run through every detail, and fascinate the beholder, are almost wholly to be ascribed to the more or less prominent Mozarabic feeling that pervades all Spanish art, till the fatal day when German and Italian influence caused all this to be abandoned for the cold inanities of a pseudo-classical revival.

BOOK VIII.

ENGLAND.

CHAPTER I.

CONTENTS.

Saxon buildings: Norman — Canterbury — Other Norman Cathedrals: Early English — Salisbury — Westminster Abbey — Windows — Styles of Tracery: Edwardian Style — Wells — York — Ely — St. Stephen's Chapel — Wooden Roofs: Tudor Style — Royal Chapels.

CHRONOLOGY.

	DATES.		DATES.		DATES.
William I.	Accession, A.D. 1066	Edward I.	Accession, A.D. 1272	Henry VI.	Accession, A.D. 1422
Henry I.	„ . . . 1100	Edward II.	„ . . . 1307	Richard III.	„ . . . 1483
Henry II.	„ . . . 1154	Edward III.	„ . . . 1326	Henry VII.	„ . . . 1485
Richard I.	„ . . . 1189	Richard II.	„ . . . 1377	Henry VIII.	„ . . . 1509

THE history of Gothic architecture in England has of late years occupied the attention of so many competent persons, and been written so fully and in such a variety of forms, that little that is new remains to be said on the subject. Such a mass of information, both scientific and popular, is to be found in the works of Britton and the elder Pugin, with those of Rickman, Willis, Sharpe, and others, that there are few points on which the student may not easily satisfy himself.

It is true that a general and complete account of the style is still a desideratum, and one which it is impossible to attempt to supply in such a work as this. All that can be done is to place the style in its true light with reference to those already described, to point out those peculiarities in which it resembles and those in which it differs from the Continental Gothic, and generally to assign to it its proper place among the architectural creations of mankind. At the same time the mass of information respecting so many varieties of style given in the preceding pages will enable us to appreciate the true value of our own, and to understand the prominent characteristics which distinguish it from other cognate or contemporary styles.

As in all other countries of Europe, the style may be naturally divided into two great branches, the round arched and the pointed arched. The former as easily subdivides itself into the Saxon and the

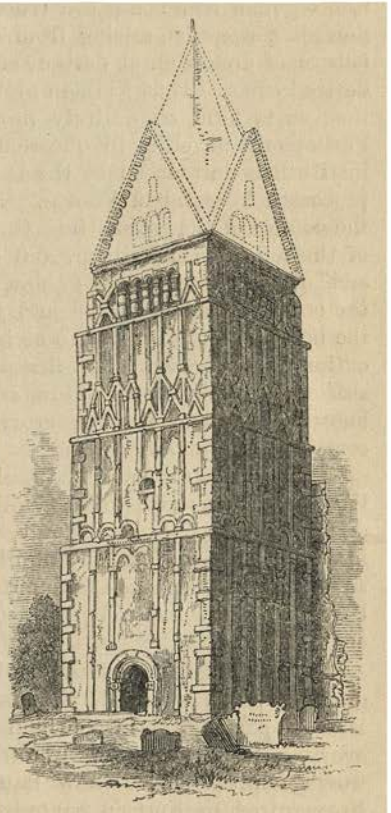
Norman; the latter, as before pointed out (p. 475), may conveniently be divided into Plantagenet, Edwardian, Lancastrian, and Tudor; the periods of transition between each of these falling by a curious coincidence in the reigns of the three Richards. These divisions are, it is true, somewhat indefinite, but they are necessarily so, as the changes were frequently slow, and began, or were nearly perfected, in one part of the country or in one building, before they were thought of elsewhere; and in no place were they suddenly introduced so as to enable us to fix the exact year or mode of their introduction. The fact is, that it was a constant progression from a rude to a highly finished and elegant style; the improvements taking place steadily from year to year up to a certain point, and then declining as steadily to the Elizabethan period, without any resting-place being found in the whole series, so that all attempts at a more rigid classification only lead to false impressions or to error, and the sooner they are abandoned the better.

Saxon.

By Saxon architecture is meant of course the works of the Saxons in England before the Norman Conquest in 1066. The remains of it, however, are so few and insignificant that it is difficult to say exactly what it was. It is true 120 churches are enumerated in the last edition of Rickman which show traces more or less distinct of this style, but among these there is no one instance of a complete Saxon church built before the Conquest; in some there is a tower, in others a fragment of walling, in others only a door or a window. These scattered remains suffice to enable us to assert that the style was rude and the details clumsy as compared with the few specimens that remain upon the Continent of the Carlovingian era. Indeed, the state of England was singularly inimical to the development of any of the arts of peace, for with the exception of the one brief but bright period of Alfred's reign, the country was either torn to pieces by domestic troubles or devastated by foreign invasions, so that no resting time was given for perfecting the native arts or for erecting durable monuments. Had any of the cathedrals of the Saxon epoch survived to the present day, it might perhaps tend to modify this opinion; but every one of these was rebuilt either during the Norman or subsequent periods, and not one vestige of their superstructure remains. We have of one only a sufficiently clear account to enable us to form an opinion of what its plan and dispositions were. The description left by Edmer the Singer of the Saxon cathedral of Canterbury, which he saw before it was rebuilt by Lanfranc in 1070, suffices to prove that it was a double apse cathedral, like those of Germany, with lateral entrances, one on the north, the other on the south side. Behind the eastern apse was a circular baptistery erected by Cuthbert the eleventh archbishop, "for," says our author, "the following purposes: that baptisms might be celebrated therein; that certain judicial trials that were formerly carried on in the church might be held there; and lastly, that the bodies of the archbishops might therein be buried,

thus departing from the ordinary ancient custom of burial beyond the walls of the city."[1]

It is interesting to find the transitional date so exactly fixed when the baptistery and tomb-house were thus confounded, and the judicial church separated from the basilica. After the time of Edmer, the prelates were buried within the walls of the cathedrals. It is probable that the work executed by Lanfranc was an extension, and not a total rebuilding of the old structure. In that case the baptistery was converted, if with an internal range of pillars, into a chevet—if without pillars, into an apse. All remains of the original Saxon cathedral have since perished. It probably was only a little less rude than the parochial churches of which we have so many fragments. Its loss is perhaps in itself not much to be regretted, though, if we knew more about it, it would enable us to explain many of the peculiarities of the Norman cathedrals which still remain a mystery from our ignorance of what preceded them. We may safely, however, ascribe to Saxon influence all those peculiarities in which the English style differs from the Continental Norman, and, were it worth while, we might by this path arrive at some conclusions regarding Saxon architecture.



676. Tower of Earl's Barton Church. From Britton's Architectural Antiquities.

The tower of Earl's Barton in Northamptonshire combines in itself more of the characteristics of the Saxon style than any other specimen known. As shown in the woodcut (No. 676), the angles are decorated by a peculiar rustication of stones placed alternately horizontally and vertically. Where surface decoration is attempted, it consists of long pilaster-like slips joined by small circular or straight-sided arches. This possibly may be the barbarian imitation of the "junceæ columnæ" of Cassiodorus mentioned above,[2] and shown in the apse of the cathedral at Verona (woodcut No. 420).

The windows are always small, and generally divided by short stumpy balusters.

The roofs of the towers seem generally to have taken a form like

[1] Edmer, Vita S. Bregwini, Aug. Sac., tom. ii. p. 186.

[2] Page 542.

that of Paderborn (woodcut No. 451), or sometimes with only two steep gables. Painting seems to have been the favourite mode of decoration, and consequently we find but little carving on the doorways or elsewhere.

Internally the pillars in Saxon buildings were probably so clumsy and rude that they have been in almost all instances removed to make way for more convenient arrangements.

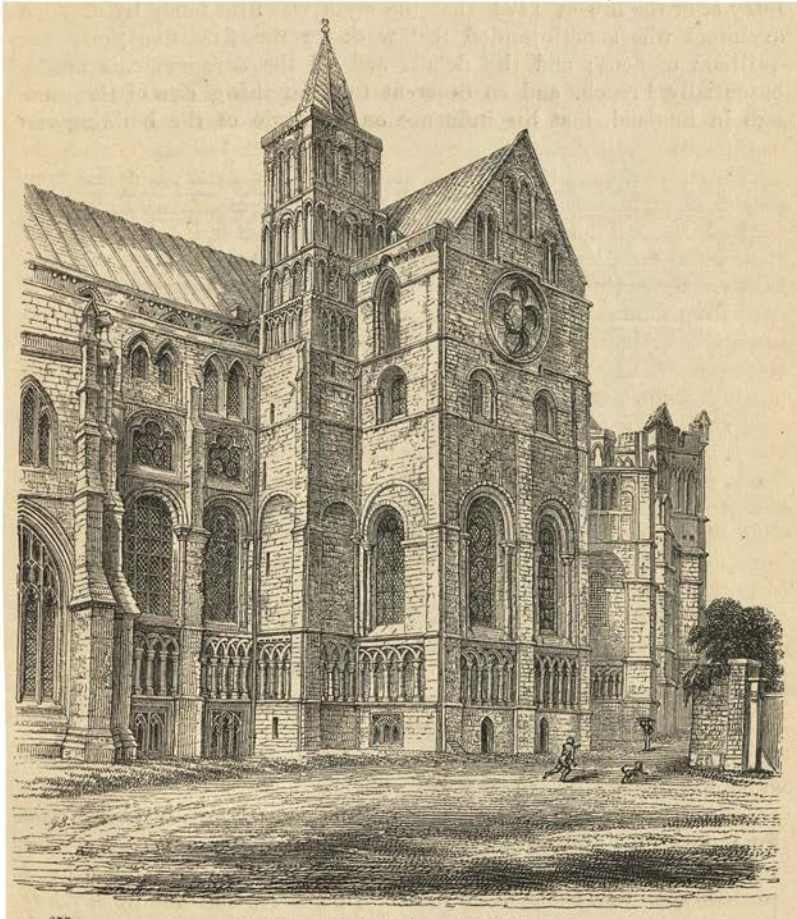
Norman.

What the Normans brought over with them was not so much a new style as a bolder and more perfect manner of treating one already in use, together with better constructive processes, and altogether a more perfect conception, arising from considerable experience of the true nature of architectural design, and the true mode of producing the desired effect. Thus Norman architecture introduced so many novelties, as to form an entirely new era in that used by the Saxons. Perhaps the novelties in question were as much owing to the new institutions introduced by the Conquest as to the new architectural processes invented in France. The confiscation or appropriation of the estates of the Saxons had thrown immense wealth into the hands of the followers of William, and enriched the aristocracy, both feudal and ecclesiastical, to an extent previously unknown. Besides this, the centralization of power and the more rigorous administration of the laws afforded that leisure so indispensable for the successful prosecution of any branch of the fine arts. These causes would alone have sufficed to make an epoch in architecture, and, combined with the knowledge which the conquerors had acquired in the art, effected a complete revolution.

As might be expected, the earliest specimens of the new style are those that most resemble the Continental Norman, so that in the works of Gundulph at Rochester, and Walkelyn at Winchester, as well as in what remains of Lanfranc's building at Canterbury, there is scarcely any difference from the Continental Norman except such as may fairly be ascribed to the inexperience and clumsiness of the workmen employed.

By the beginning of the 12th century the style had been to a great extent naturalized, and assumed a separate existence. This is well exemplified in Durham cathedral, a building differing in every respect from anything on the Continent, and which, were it worth while to invent new names, should be called either Saxon Normanized or Norman Saxonized, but certainly not Norman. By whatever name we may agree to designate it, this is one of the finest specimens of architecture in the kingdom. Bold, massive, and grand, it affords a striking contrast to later examples, such, for instance, as the nave of York, which, though spacious and elegant, and presenting a degree of refinement in every process and every detail to which Durham cannot pretend, is not nearly so imposing as the rude grandeur displayed by the latter, notwithstanding its far smaller dimensions.

On the other hand, the Galilee [1] of Durham cathedral is far more essentially English than anything erected in the subsequent century, and, with the infirmary chapel at Ely, shows how far the style of wooden roofing had encouraged the native architects to attenuate the supports of their buildings, and how they had learned to adapt to their purposes the zigzag and interlacing arches of the earlier style. Indeed, the buildings of the last half of the 12th century show that the



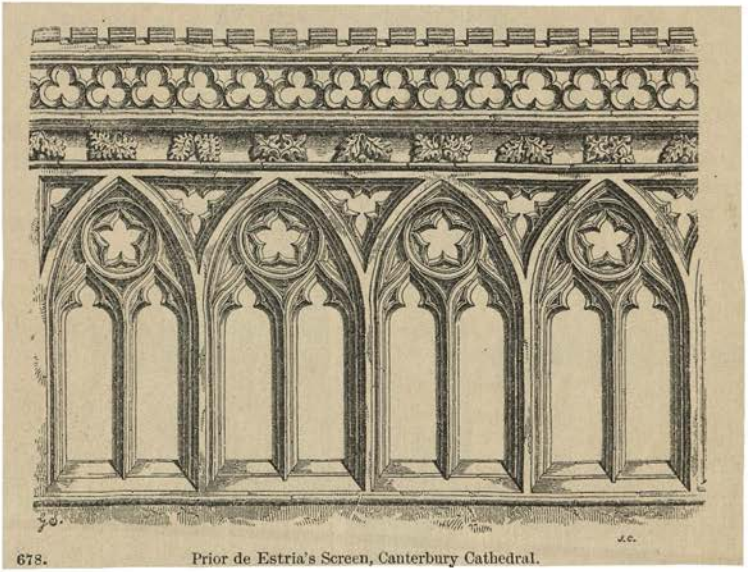
677. South-Eastern Transept, Canterbury Cathedral.

English were making considerable progress in the elaboration of a perfect round-arched Gothic style, which probably would have rivalled or surpassed that of the Germans; but, like them, though nearly half a century earlier, they fell under French influence, and for a while were content to be copyists, till familiarity with the style again

[1] Erected by Bishop Pudsey in the last year of his episcopate, which terminated 1197.

enabled them to assert their independence, and become, at least to a certain extent, inventors of a new and original form of the universally prevailing architectural style of the age.

The date of the introduction of the pointed arch in England—for it may be considered as established that it was *introduced*—is a question which has been much discussed, but is by no means settled. My own impression is that it was at the rebuilding of the cathedral of Canterbury after the fire of 1174 that the style was first fairly tried. The architect who superintended that work for the first five years was William of Sens; and the details and all the arrangements are so essentially French, and so different from anything else of the same age in England, that his influence on the style of the building can



678. Prior de Estria's Screen, Canterbury Cathedral.

hardly be doubted. Of course it is not meant to assert that no earlier specimens exist; indeed, we can scarcely suppose that they did not, when we recollect that the *pointed arch* was used currently in France for more than a century before this time, and that the *pointed style* was inaugurated at St. Denis at least thirty years before. Still this is probably the first instance of the style being carried out in anything like completeness, not only in the pier arches and openings, but in the vaults also, which is far more characteristic.

Even after this date the struggle was long, and the innovation most unwillingly received by the English, so that even down to the year 1200 the round arch was currently employed, in conjunction with the pointed, to which it at last gave way, and for three centuries was banished entirely from English architecture.

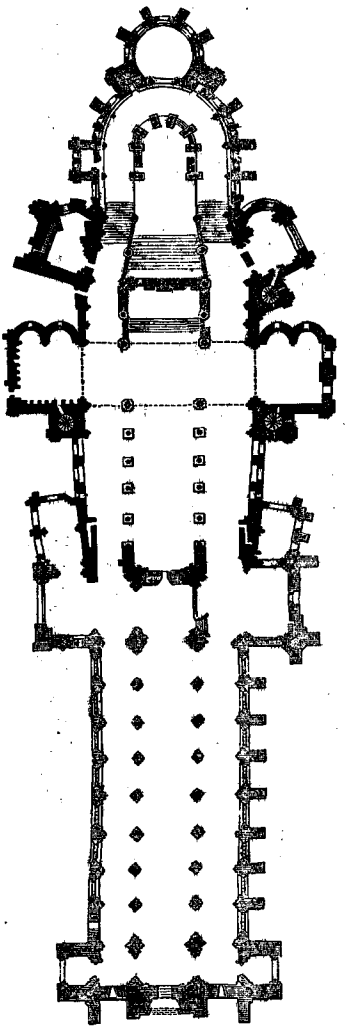
Like the greater number of English cathedrals, that at Canterbury was commenced shortly after the Conquest, and the building of it con-

tinued down to the Reformation. As it is one of the most important and interesting of all, a somewhat detailed description of it may render what follows more intelligible.

679. View of the Chapter House and Angel Tower, Canterbury. From a drawing by G. Scharf.

When Lanfranc, Abbot of Caen, was appointed by the Conqueror, in 1070, to the see of Canterbury, he found the old Saxon cathedral in ruins, having been destroyed by fire some years previously. He commenced a new one exactly on the same plan and of the same dimensions as the church of St. Stephen at Caen, consisting of a nave and transept,

shaded light in the plan (woodcut No. 680), and with a choir, an exact copy of that shown in fig. 1, woodcut No. 521. The one great difference was, that the roof of the central aisle of the English church, and probably that also of the side aisles, were of wood, while the corresponding parts in the French example were vaulted with stone. Twenty years after the completion of this, or in the year 1096, the choir was enlarged by Archbishop Conrad, in the same manner as that at Caen, though on a somewhat different plan, as is shown by comparing the part shaded dark in the plan with the woodcut just referred to. On this occasion the side aisles were vaulted, but the central roof was still of wood. Owing probably to this circumstance, it was again destroyed by fire in the year 1174. The rebuilding, or rather repair, was commenced by William of Sens in the following year. The crypt still remains as left by Conrad, so also do the lower parts of the walls of the choir; but above that the whole choir, as we now see it, was the work of this period. Its external appearance may be judged of from woodcut No. 677. It explains well the transitional character of the period; for though the pointed arch is used commonly internally as a constructive feature, it is only timidly that it is allowed to appear in the decorations, till near the roof, which part of the wall was of course somewhat later.

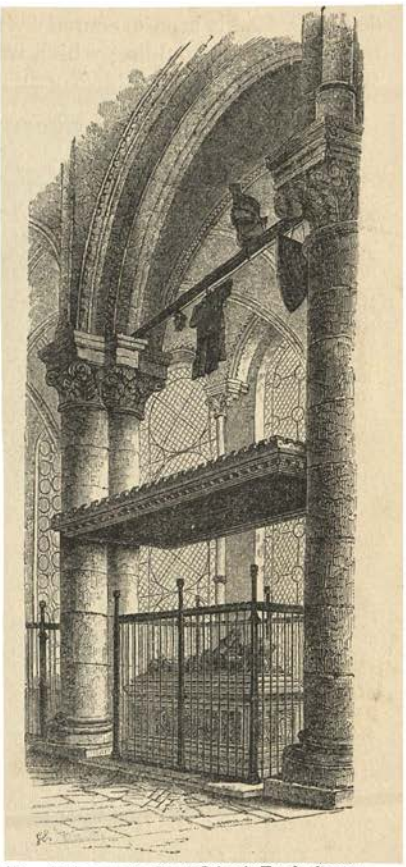


680. Plan of Canterbury Cathedral. Scale 100 ft. to 1 in.

Almost before this choir was completed, a further extension eastward was determined upon, and the Trinity Chapel and Becket's Crown[1] were erected between the years 1179 and 1184, thus completing the size of the cathedral as we now find it. In the addition the pointed arch was used wherever the space to be spanned was narrow, the round arch

[1] It is not easy to prove it, but I cannot escape the conviction that Becket's Crown is only a rebuilding of the old baptistery, in which the Saxon archbishops were buried as mentioned, p. 844, and the extension of the Trinity Chapel was made on purpose to include it.

where it was wider. That over the Black Prince's tomb (woodcut No. 681) is circular in form; those east and west of it pointed. They all have, however, the same transitional character. The shafts generally are coupled, the archivolts moulded in successive *planes* of decoration, and almost all the features of the later style shadowed forth, though none yet completed.



681. Arch over the Black Prince's Tomb, Canterbury Cathedral. G. Scharf, del.

After this nothing of importance seems to have been undertaken till the new enclosure of the choir was commenced and completed (1304–5), in the very best age of English art, as may be seen from the illustration (woodcut No. 678).

The rebuilding of the nave was commenced about the year 1378, and completed about 1410, being erected on the foundation of the old Norman nave, which was entirely obliterated by the process, except the north-western tower, which was wantonly destroyed within the last few years, and a new one commenced in 1832 to replace it.

About the same time as the nave, or rather earlier, the chapter-house was rebuilt; and in the year 1495 the central tower was commenced, with the arches to support it, and completed shortly afterwards. The external appearance of these three last objects is shown in the woodcut No. 679, which serves also to illustrate the admirable effect obtained by the English architects by placing the principal features of their churches on the intersection of the nave with the transept. Though late in date, its outline is pleasing, and it groups well with the surrounding objects, being sufficient to give dignity to the whole, but without overpowering any.

The cathedral at Rochester was commenced shortly after that at Canterbury, by Gundulph, a monk of the abbey of Bec in Normandy, who was appointed bishop of the see in 1077. It still retains all the principal features of its nave unaltered, and enables us to judge fairly what the appearance of the metropolitan cathedral was in this respect. Its architecture is plainer than that of the contemporary examples in France, though, owing to its having been always destined for a wooden roof, the piers and the design generally are lighter than where preparation was made for a stone vault.

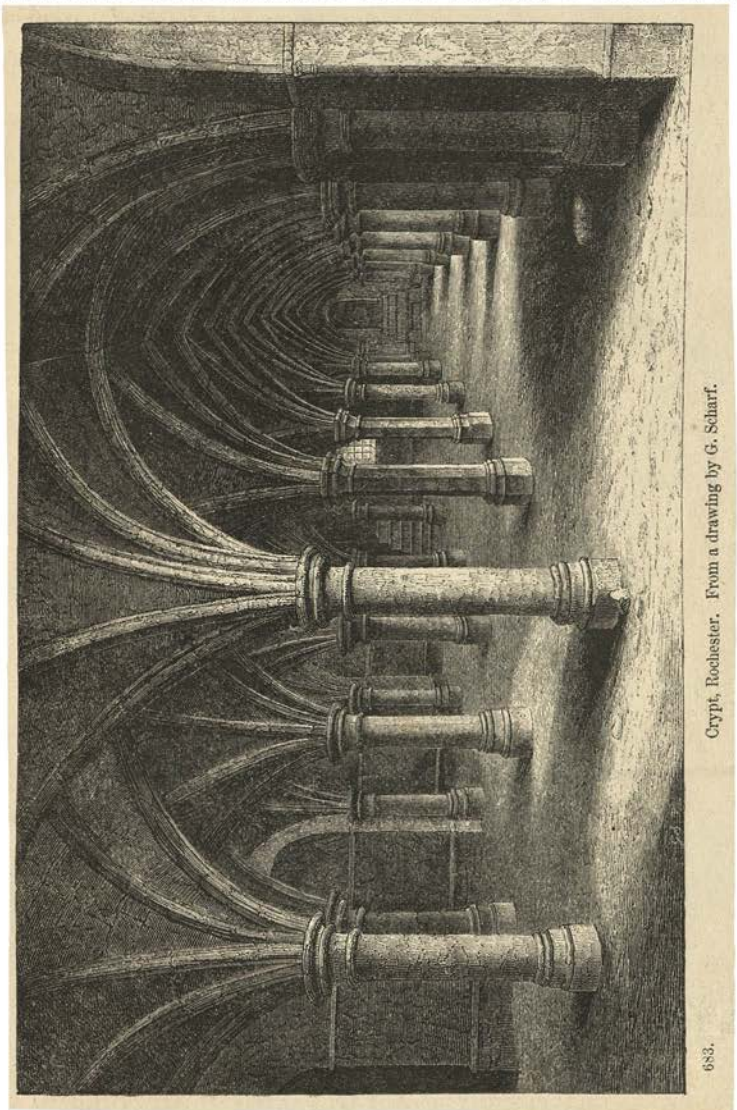
Its western doorway, which remains intact (woodcut No. 682), is a fair specimen of the rich mode of decoration so prevalent in that age. It must be considered rather as a Continental than as an English design. Had it been executed by native artists, we should not entirely miss the billet moulding which was so favourite a mode of decoration with all the nations of the North.

682. Rochester Cathedral, West Doorway.

The choir and the crypt below it were rebuilt in the first years of the 13th century, and dedicated 1227. The latter (woodcut No. 683) is one of the best specimens of its class to be found in England, as after this date the subterranean churches became less important than in the previous centuries. No new crypts were built after this time, though we find the older retained, and sometimes restored, down to a much later period.

The cathedral at Chichester was commenced immediately after the removal of the see from Selsea in 1082, and the nave, as we now see it,

was probably completed during the next thirty-six years, though the whole was not ready for dedication till about the year 1148. Owing to this circumstance the original choir has the elongated form which afterwards came into use, and it was not necessary to rebuild it, like

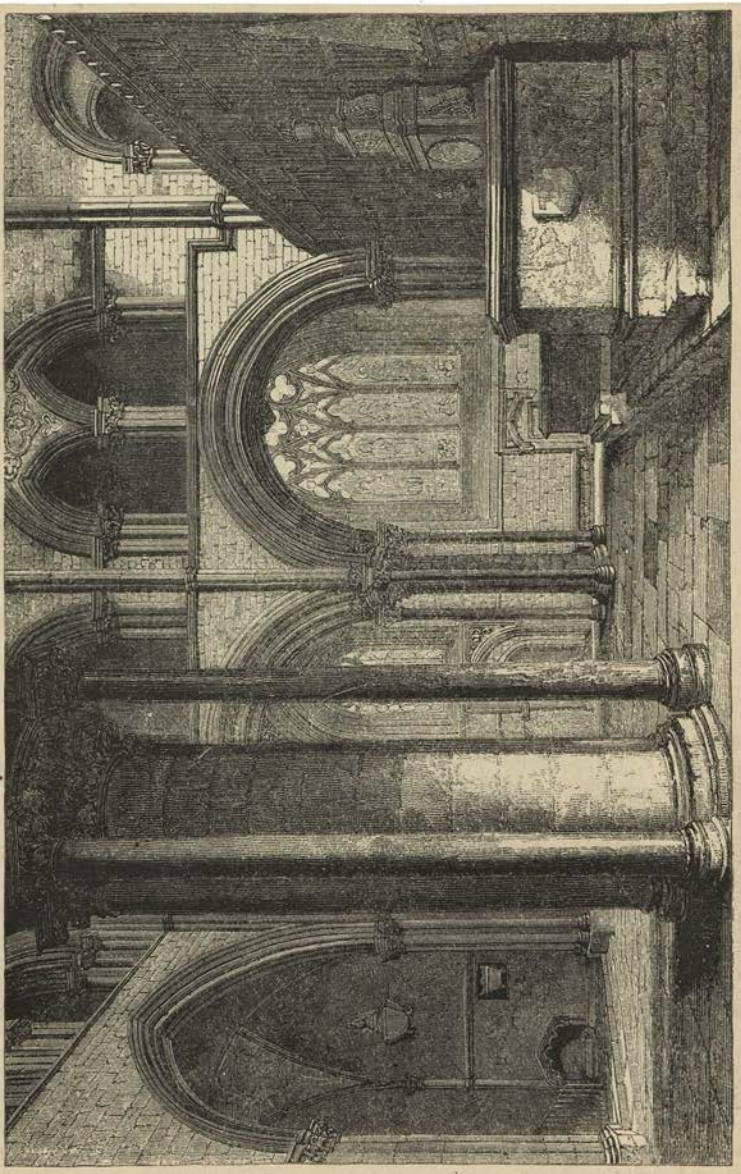


683. Crypt, Rochester. From a drawing by G. Scharf.

those of Canterbury and Rochester, the old Norman choir being used to the present day.

When the church came to be extended eastward, as was almost always the case in England, all that was required was to continue the walls in that direction, as shown in woodcut No. 684. This extension

took place in the early part of the 13th century, and is a pleasing specimen of the completed transition. The pier-arches are still circular, not because the use of the pointed arch was not understood, for the eastern



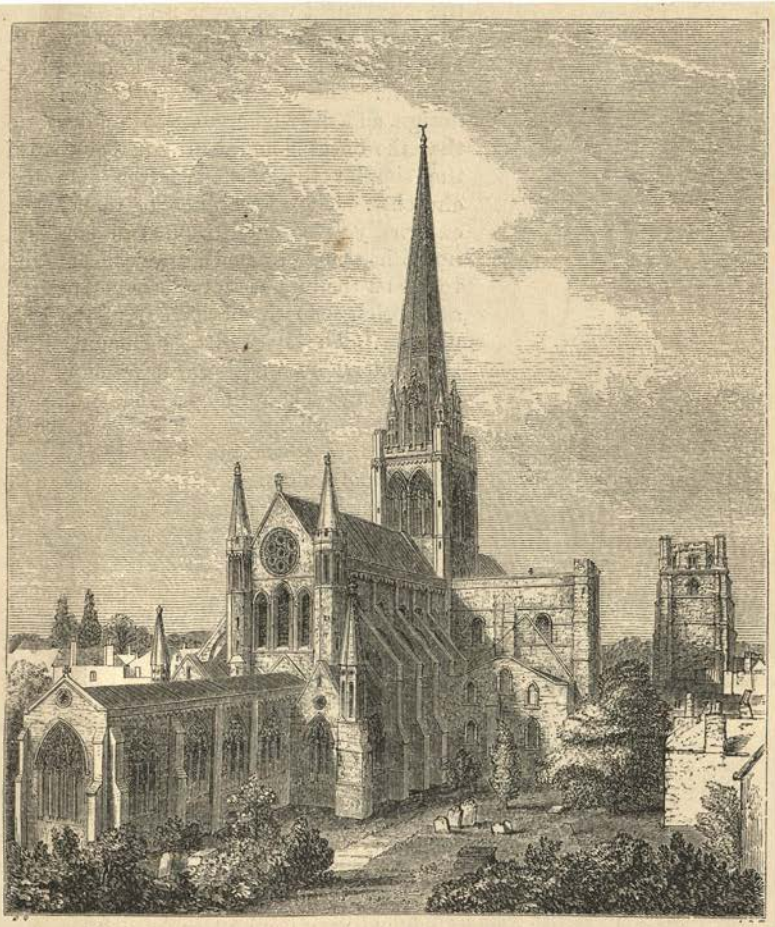
Presbytery of Chichester Cathedral. From a drawing by G. Shaw.

654

arch, shown on the left of the woodcut, though of the same age, is completely pointed. If the space to be enclosed had been a little longer, and had therefore required three bays, or a little shorter, so as to have been

divided into narrower spaces, pointed arches would have been employed. The architects adopted, in fact, whichever of the two forms best suited their immediate purpose. It had not in those days become a dogma that architectural beauty could only be produced by the use of the pointed arch.

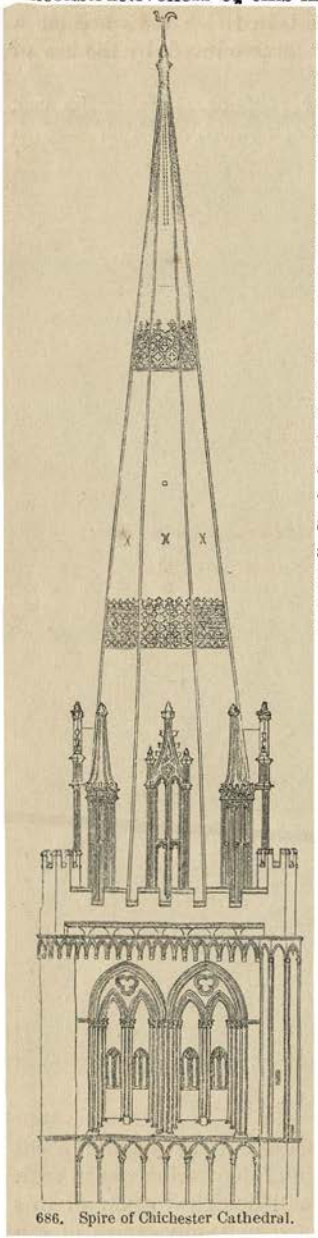
The illustration is remarkable in another respect, showing the use, it might almost be called the abuse, of Purbeck marble, which English



685. Chichester Cathedral. G. Scharf, del.

architects indulged in at this period. From about the year 1175 till past the middle of the 13th century, no mode of decoration was in such favour in England as the employment of small detached shafts of this material, applied to the sides of the stone constructive piers of the building. When the whole of the architecture was painted in rich but opaque colours, the polished shafts of dark marble must have afforded a beautiful contrast. Subsequently the more brilliant colours of the

painted glass eclipsed the effect of the marble shafts, on which the unconstructiveness of this mode led to its abandonment. In Chichester cathedral the shafts are further detached than in any other known example from the piers, which are of the same costly material. The result is not pleasing, which seems to have been felt in those ages, for the experiment was never repeated.

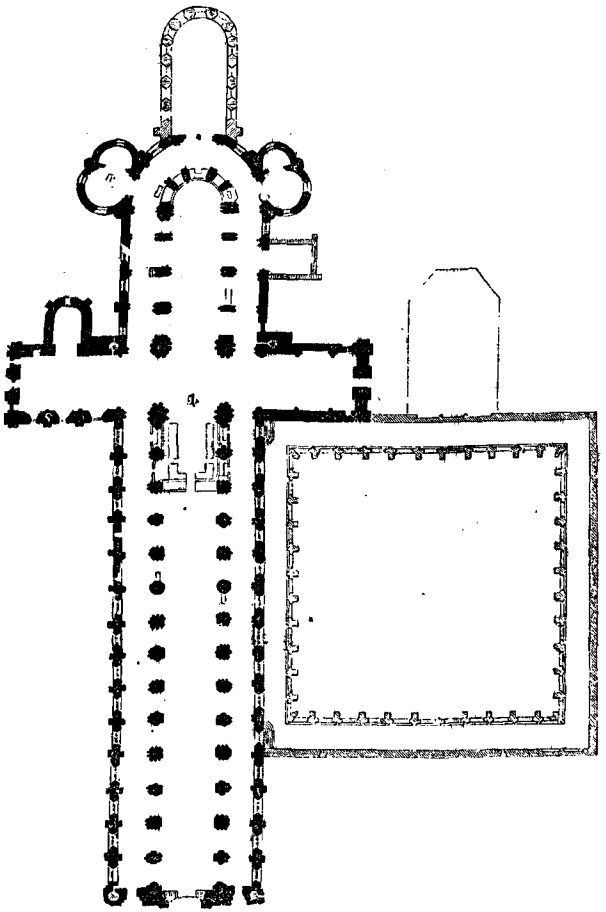


686. Spire of Chichester Cathedral.

This cathedral is the only one in England that has five aisles in the breadth of its nave. This was not part of the original design, and the whole is on so small a scale that the effect is not at all equal to that of the simpler three-aisled naves of other churches. The appearance of the church externally (woodcut No. 685) is pleasing, notwithstanding its small dimensions. The tower on the intersection is of good design, and belongs to the first half of the 13th century. The spire that surmounts it is said to have been built in imitation of that at Salisbury; and though rising only to 271 feet in height, is perhaps even better proportioned to the church it crowns, and is of a more pleasing outline. The angle at the summit is about 13 degrees. At Salisbury, Norwich, Louth, and generally in all the tallest English spires, it is only 10 degrees, which is certainly too slender. On the Continent, in the best examples, as at Cologne (woodcut No. 607), Friburg (woodcut No. 608), and others, it is about 15 or 16 degrees, which, unless the spire is of open work, or very much ornamented, is on the other hand too low. As a general rule it may be well to bear in mind that the spires of Continental churches have generally an angle of about one-sixth of a right angle at their apex, in England of one-ninth. The spires at Chichester and Lichfield vary from 12 to 13 degrees, or a mean between these two proportions; and from this circumstance are more pleasing than either.

Chichester possesses a detached bell-tower, shown in the woodcut No. 686. One very similar existed, till within a few years, at Salisbury; and they may have been more common formerly than is usually suspected, but being generally supposed to be useless, have been taken down.

No cathedral in England retains its original Norman plan so nearly undisturbed as Norwich. Founded in 1094, the works were pushed forward with such vigour that in 1101 sixty monks were located in the establishment. To this date therefore the original plan (shaded dark in the woodcut No. 687) certainly belongs.

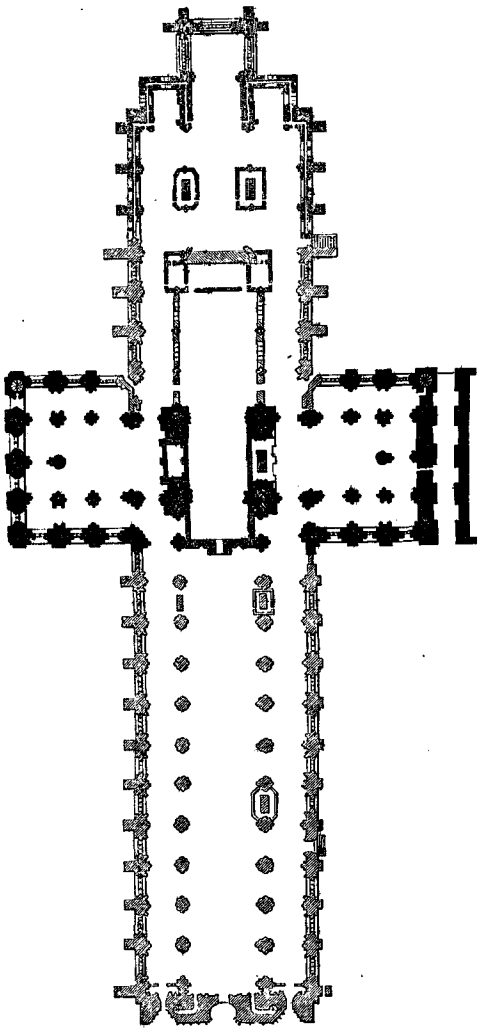


687. Plan of Norwich Cathedral. Scale 100 ft. to 1 in.

Although retaining the chevet termination of the Continental cathedrals, the general plan of this church differs most essentially from them. Its great length, as compared with its breadth, is such as is never found on the Continent; and the bold projection of the transepts is also a purely English feature, though in this instance hardly carried to the extent which the length of the nave required. A central and two western spires or towers were absolutely indispensable to complete such a design as this, which could never be made to look short by such an

addition, while they would have the full value of their height from the lowness and extreme length of the church.

The naves at Peterborough and Ely still retain their Norman features internally in all their pristine grandeur, except that whitewash has superseded the colours with which they were originally adorned. Their side aisles are vaulted, but the central aisles still retain the wooden roof they were originally designed to carry.



688. Plan of Winchester Cathedral. Scale 100 ft. to 1 in.

Winchester has in this respect been more fortunate, having been restored by William of Wykeham in the latter part of the reign of Edward III. He did not pull down the old church, but merely re-cased the Norman piers with the beautiful details of his age. We consequently have in this nave the vigour and strength of Norman architecture combined with all the elegance of the best age of the pointed style. The piers dividing the aisles are 12 ft. thick, while the side aisles are only 13 ft. wide, and the central aisle 32 ft. Yet with all this there is nothing heavy, but, on the contrary, it is perhaps the most beautiful nave of a church either in England or elsewhere, wanting only somewhat increased dimensions. Its effect is no doubt greatly heightened by the immense length of the whole church (556 ft.). There is in fact no other cathedral on this side of the Alps equally long, with the exception of Canterbury, which is almost exactly the same. Externally the church is low, but its great length is pleasingly broken, as at Ely and Peterborough, by the bold projection of its transepts, which

here extend, as usual in England, three bays beyond the aisles, their section being the same with that of the nave.

The choir of Gloucester cathedral, which is purely Norman in design, has, like the nave of Winchester, been overlaid with a veneer of masonry in the pointed style; but having been done at a later age, and by less vigorous hands, it is comparatively weak and poor. There the pointed is added to the round arched style, instead of being amalgamated with it as at Winchester.

The cathedral at Durham was commenced in the year 1093, and the works continued without interruption for forty years, when the building was so far completed that the side aisles were vaulted and the central aisle covered with a wooden roof. In this instance, however, and in this alone of all English cathedrals of this age, a stone roof was certainly intended from the beginning, the piers of the nave being alternately round and shafted, so as to support a hexapartite vault. Though the nave is only 32 ft. wide, the builders had not the skill or courage to carry out this intention till the time of Prior Melsonby (A.D. 1233), 100 years after the building had been practically finished.

The Galilee, or great western chapel, which renders this cathedral something like a German double apse church in plan, was erected between these two periods, in 1153, and is a light and beautiful specimen of the best age of the round-arched style. This was originally designed to support a wooden roof of no great span, which led the architect to venture on a lighter style than had hitherto been employed.

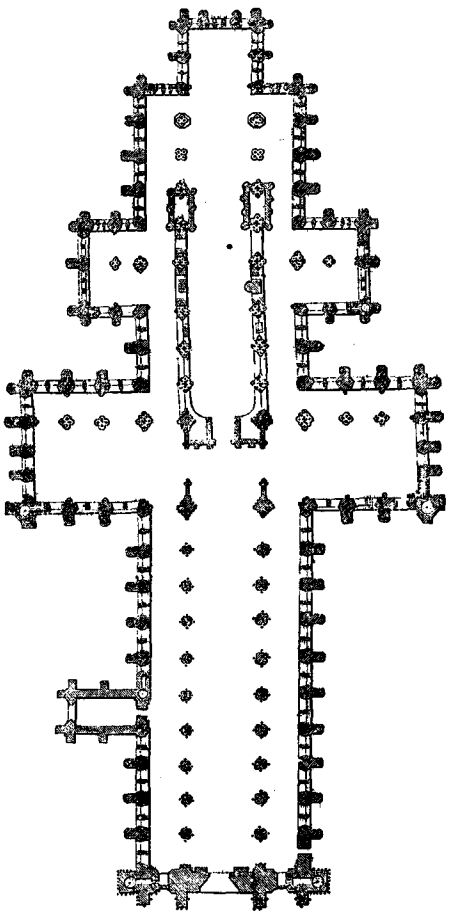
The Chapel of the Nine Altars, at the east end, was commenced about the year 1235, and completed, in the early pointed style, about 1273, or 180 years after the commencement of the cathedral. Additions and alterations were made afterwards, but the cathedral was completed, in all essential respects as it now stands, during this period. This cannot be said of any other cathedral in England; and Durham certainly is one of the noblest examples of this great transitional epoch.

689. Five Sisters, York. From Britton.

One of the first important buildings erected wholly in the pointed style was the new choir of Lincoln cathedral, built by St. Hugh in the last decade of the 12th century. The chapels retain in plan the circular form of the earlier style, but the windows, vaults, and all the constructive features are pointed, and of that peculiarly English

form which has been denominated lancet. Though found in Normandy, it is there the exception, while in England for above half a century it was almost universally employed, and often with great beauty. The windows, for instance, called the Five Sisters in the north transept of York cathedral, though merely tall, simple, undivided openings, are as fine as anything of their class executed afterwards, and both externally and internally have a constructive solidity and grandeur not found in the later mullioned examples. Their one defect is their insufficiency for the display of painted glass, which, however, at the time at which they were designed, had hardly come much into fashion in England.

The first great cathedral built completely in the new style was Salisbury, begun in 1220 and finished in all essentials in 1258. Restoring, in imagination at least, the painted glass which once filled all its windows and the colour that once covered the walls and vaults, its internal effect must have been extremely beautiful; far more so than that of its great rival at Amiens, with which it is so often compared, though of scarcely half the dimensions. It must be remembered that in the French cathedral the clerestory or "haut œuvre" was not erected till after the great fire in 1258, when Salisbury was complete, and is, therefore, the work of a more advanced age. As it at present stands, there is a coldness and leanness about Salisbury that detracts considerably from its effect; but this is owing far more to modern abominations than to anything inherent in the design.

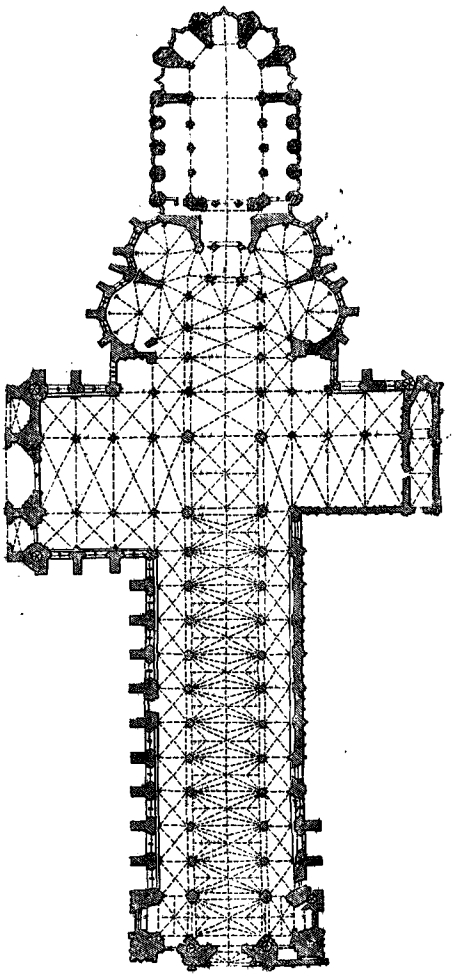


690. Plan of Salisbury Cathedral. Scale 100 ft. to 1 in.

Externally the effect of this cathedral is even better than that of the interior. The bold breaking of the outline by the two transepts instead of cutting it up by buttresses and pinnacles is a master-stroke of art; and its noble central tower, which, though erected at a later age, was evidently intended from the first, crowns the whole composition

with singular beauty. The western façade is the worst part of the design, and considerably mars the completeness of the cathedral. Had this part either the richness of the west front at Wells or the grace of that of Lichfield, the cathedral would stand nearly unrivalled as a specimen of purely English architecture.

The next great building of this age which was completed so much in the same style as to enable us to judge easily of its effect was the abbey at Westminster, commenced twenty-five years later, and finished to beyond the transept in 1269, or nineteen years before Amiens was completed. This, therefore, as more nearly corresponding in date, may be more justly selected for comparison with that church; and making the same allowance for dimensions as in the former case, few will hesitate in assigning the palm to the English example. The least successful part of its design is the chevet, which the English architects never understood, and which is certainly here used with considerable awkwardness. It is evidently a copy, or rather an imitation, of a French feature; so also is the proportion of height to breadth in this church, being as 3 to 1, which is certainly an error in excess. This is for its width the loftiest cathedral in England, the proportion in this country being often as low as 2 to 1 for the central aisle, the width of the side aisle being equal to the height of its vault. All English cathedrals vary between these two ratios, their average being 2·36 to 1. Thus supposing the central aisle of an English cathedral to be 30 ft. wide, the height would be 70 ft., while the French proportion would make it 90. The French mode of dividing the height into two equal parts at the line immediately



691. Plan of the Abbey at Westminster. Scale 100 ft. to 1 in.

below the triforium is used at Westminster, and also that of again dividing the upper part into three equal divisions, one of which is assigned to the triforium and two to the clerestory. All this looks so like the way in which the Germans borrowed the French style, that there can be little doubt but that this is the result of a similar process of imitation. The same may be remarked of the tenuity of the piers and general lightness of the structure internally. Most of these are undoubtedly defects, but to redeem them there is a vault, richer and more beautiful in form than any ever constructed in France; a triforium as beautiful as any in existence; and generally an appropriateness of detail and sobriety of design which rendered this abbey-church in its primitive state one of the most beautiful Gothic edifices in the world. It only wants a little more strength in its supports and little less exaggeration in height to be nearly perfect.

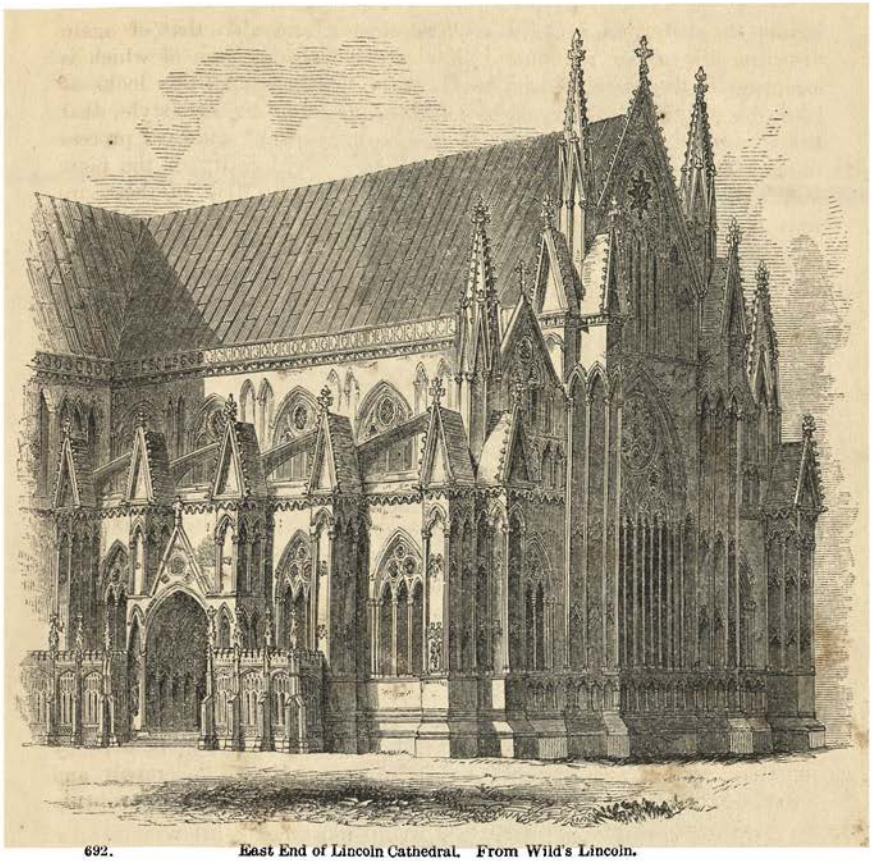
In the exterior of Westminster Abbey another French characteristic betrays itself. It never was intended to have a central tower,[1] but it must always have been proposed to add two at the western end, probably nearly of the dimensions of those erected by Sir Christopher Wren. Its bold projecting transepts and noble length of nave are truly English features, and give it as great dignity externally as it has grace in its internal arrangements.

The first half of the 13th century, which produced these two great churches of Salisbury and Westminster, was the great cathedral building age of this country, as it was of France. Most of our larger ecclesiastical edifices received important additions in the style then current. The previous century, however, had been one of such vigour, and displayed so much building energy, that far less remained to be done by us than by our neighbours; and men were content to repair and enlarge without ignoring all trace of the previous erections, except in the two instances just quoted.

Next in completeness and perhaps in grandeur may be quoted Lincoln; all except the presbytery being of this age, and this part follows so immediately after the rest as not to produce any want of harmony, but merely a degree of enrichment suitable to the increased sanctity of the altar and the localities surrounding it. The western part or nave may almost be called a failure from the too wide spacing of the piers[2] and their want of solidity. The eastern part is equal in design and execution to anything of the most perfect age, and of a style purely English, both in proportion and in decoration. It was probably finished about the year 1282, and may be considered as the first complete specimen of the true Edwardian style of perfected English art. In it the lancet form wholly disappears, to give place to the perfected "circle tracery," usually called "geometric," which was first introduced in Westminster Abbey, but there used without foliation or that subordination of parts which is so essential a characteristic of true

[1] The proper mode of completing this church would be to erect a wooden spire on the intersection of the nave with the transept, similar to that on the roof at Amiens and elsewhere in France.

[2] This may have arisen from some peculiarity of the Norman nave which it replaced.

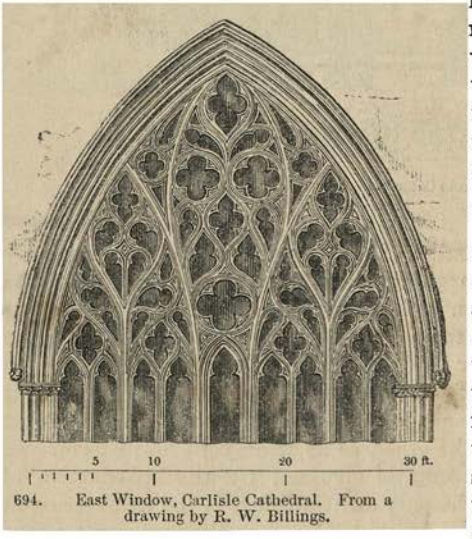


692. East End of Lincoln Cathedral. From Wild's Lincoln.

window tracery. The difficulty of making the circles fit pleasingly into the pointed arch is as apparent here as in France, and led to the adoption of flowing tracery in both countries. The English architects were sometimes singularly successful in their treatment of even the geometric style, and got over its difficulties by various expedients. In the chapter-house at York for instance (woodcut No. 693, fig. A), it was done by making the main arch of the window so pointed that the circles are piled one on the other, so as nearly to fit its form. In the other example, B, the result is obtained by the introduction of spherical triangles, so that the only awkwardness is the small space at the apex of the arch. This may be considered as the first step towards the new style which was introduced almost immediately afterwards.

The first half of the 14th century, during which flowing tracery was in vogue in England, was a period of great depression with the French, and when they again took up the style they appear to have borrowed in their turn from the English; refining this mode of tracery into the flamboyant about the time the architects in England were aban-

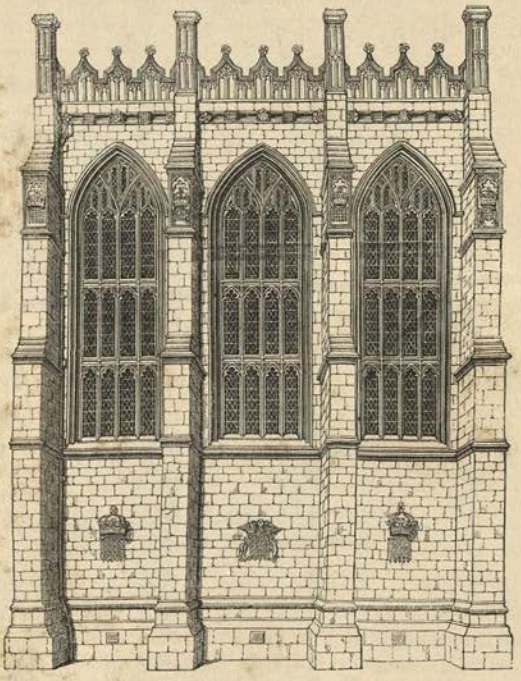
doning it for what has been called the perpendicular style. This was introduced by William of Wykeham in the latter part of the reign of Edward III. Each of these four kinds of tracery had beauties of its own, and it is to be regretted that they cannot be combined into a perfect whole. There is a noble Doric simplicity about the lancet, and a structural solidity about buildings in this style, which is not apparent with the larger openings of subsequent ages. The tracery of circles was constructively right, but always awkward, and left no play to imagination or fancy: it is no wonder, therefore, that when once flowing lines were suggested, they came immediately into such general use. Certainly the most beautiful windows in England are so constructed. The west window at York is a fine specimen of the class, but not equal to that at Carlisle (woodcut No. 694), which is probably without a single exception the most beautiful design for window tracery in the world. All the parts are in such just harmony the one to the other, the whole is so constructively appropriate, and at the same time so artistically elegant, that it stands quite alone, even among the windows of its own age. Next perhaps to these is the circle in the south transept at Lincoln (woodcut No. 695), which, though extremely beautiful, wants the perfect subordination which is so satisfactory in the example at Carlisle. This style too had its difficulties. In inferior hands it became ill-proportioned and unmeaning. Like all



694. East Window, Carlisle Cathedral. From a drawing by R. W. Billings.

that is best and highest in art, it requires the highest class of minds to cultivate it successfully. Another objection was that what it gained in design over the circular style it lost in construction. Some of the windows of this kind, that at Carlisle for instance, are master-pieces of workmanship, but few masons were capable of executing so complicated a task, and even then the expense of money and thought was enormous. These causes led to the adoption of the most eminently constructive of all styles of tracery—the perpendicular[1]—which had the merit, not only of fitting any form, but of being mechanically correct in all its bearings and all its joints. In consequence of this, it gave the architects the power of erecting windows of any size without difficulty or fear of the result. Even in the latest age it retained its propriety and elegance of design, as is shown in the sepulchral chapel which Cardinal Wolsey erected for himself at Windsor (woodcut No. 696). This,

695. South Window, Lincoln.



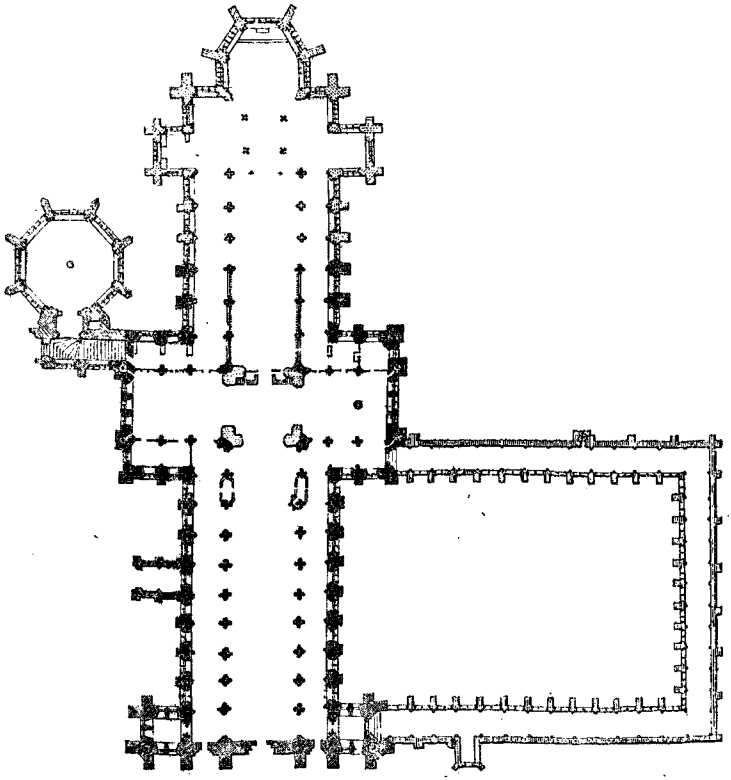
696. Wolsey's Chapel, Windsor.

[1] The west window of the Chapter-house, Canterbury (woodcut No. 679), is a good specimen of early perpendicular tracery.

though one of the latest Gothic edifices in Europe, displays neither any admixture of other styles nor any of the extravagance of German or French art of the period.

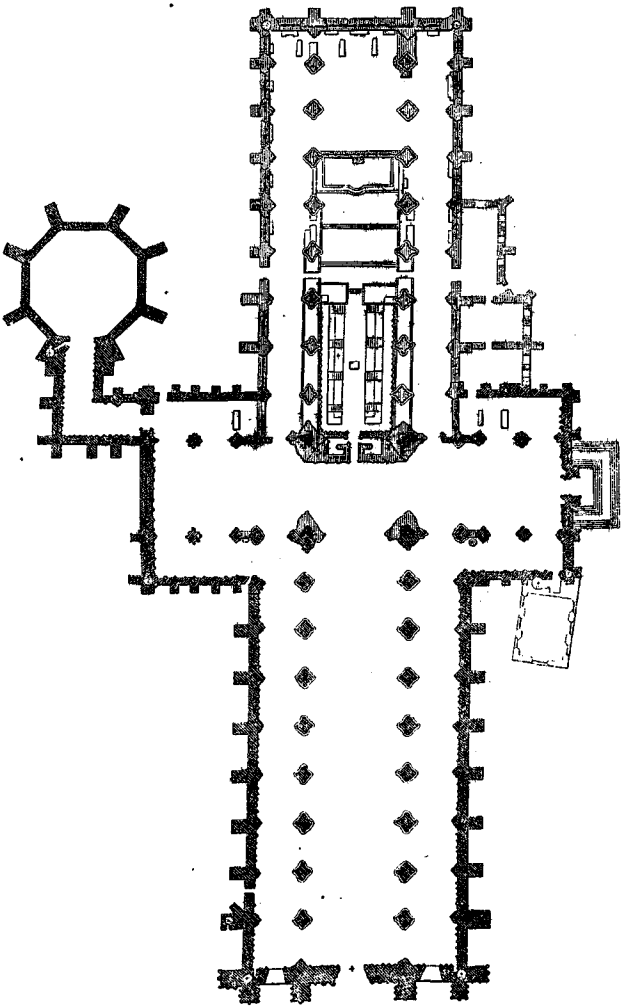
The misfortune of the perpendicular style was that it fell on evil days. Used as it was at first, or as it might in a better age have become, it may be considered nearly as the perfection of tracery. It possessed, however, within itself a fatal facility which brought down the art to the meanest capacity, and afforded no scope or exercise for the highest intellects. The tendency of the age was for the greatest possible effect at the least possible expense; hence the perpendicular tracery soon became prosaic to the last degree, and utterly unworthy either of its predecessors or of its own capabilities. Like all tracery, it was merely a frame-work subordinate to the painted glass which filled the windows. In attempting to judge of its propriety or beauty, it is always necessary to bear this in mind: it may sometimes look cold and inartistic now, but when the stained glass was perfect the case must have been widely different.

The cathedral of Wells belongs principally to the Edwardian age, though it was commenced as early as 1214 and not completed till 1465. Though one of the smallest, it is perhaps, taken altogether, the most



697. Plan of Wells Cathedral. Scale 100 ft. to 1 in.

beautiful of English cathedrals. The sculptures of its western façade are quite unrivalled, and with their architectural accompaniments make up a whole such as can only be found at Rheims or Chartres. Its nave, though narrow, is well proportioned, and its choir of the most exquisite detail. Even these are surpassed by the Lady chapel, a



698. Plan of York Cathedral. Scale 100 ft. to 1 in.

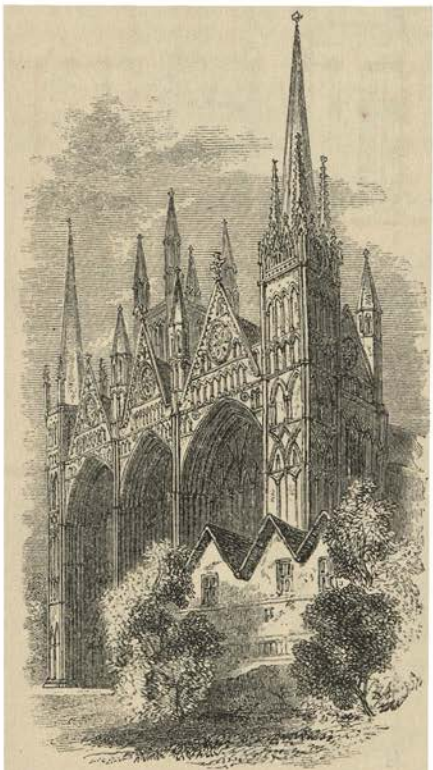
building of the very best age. The mode in which this is joined on to the body of the church is a master-piece of design, superior to any thing of the sort found elsewhere.

Externally its three well-proportioned towers group so gracefully with the chapter-house, the remains of the conventual building, the

ruins of the bishop's palace, and the tall trees by which it is surrounded, that, taken altogether, there is no instance so characteristic of English art, nor an effect so pleasing produced with the same dimensions.

In strong contrast to this is the cathedral at York. There the transepts are of bold early English (woodcut No. 689), the nave of the best Edwardian style, and the choir so slightly subsequent to the best age that the decline can hardly be said to have been felt in its design, yet internally the effect is poor and devoid of grandeur, notwithstanding that the building is larger, and that it still retains more of its original painted glass than any other cathedral in England.

Its chief defect is its great width in comparison with its length, combined with the wide spacing of the pier arches, which enables the spectator to see through the building in every direction; and it wholly wants the poetry of design found in Wells or Salisbury, or the picturesque admixture of styles that gives such interest to Canterbury or Winchester.



699. West Front of Peterborough Cathedral. From Britton's Picturesque Antiquities.

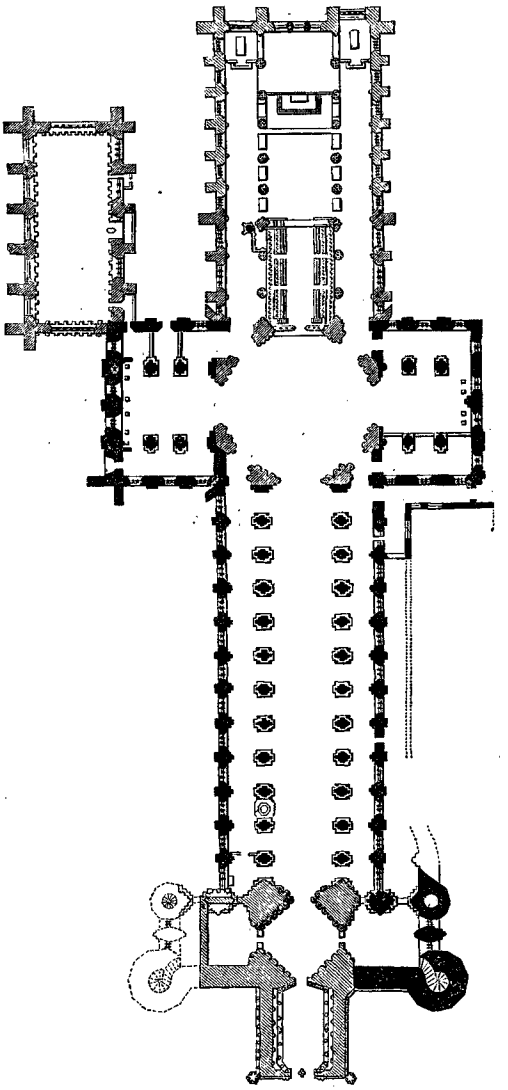
Externally the three towers of York cathedral group most pleasingly in every direction, and its western façade is in justness of proportion and elegance of detail equal to anything in England.

The sides of the nave can hardly be said to be finished. Originally it was intended to vault the central aisle of the nave, but this was beyond the means or the courage of the architect. The building of the pinnacles and flying buttresses was therefore abandoned, and the expedient adopted of covering the nave with a wooden roof in imitation of a stone vault. It probably was the first attempt of the kind, but was apparently deemed so successful that when the choir was reconstructed the wooden vault was determined on from the beginning, as no sufficient counterpoises for a stone vault were introduced; and had the architect avoided the falsehood of simulating a stone vault, this might have been as beautiful as the other, but the imitation is a mistake which nothing can redeem, and which is the one great blemish of the English style of the period.

Contemporary with Lincoln and York was Worcester, one of the

coldest and least effective of English cathedrals, though with many beautiful points of detail.

The west front of Peterborough belongs to the same great age, and as a portico, using the term in its classical sense, it is the grandest and finest in Europe, though wanting in the accompaniments which would enable it to rival some of the great façades of Continental cathedrals.



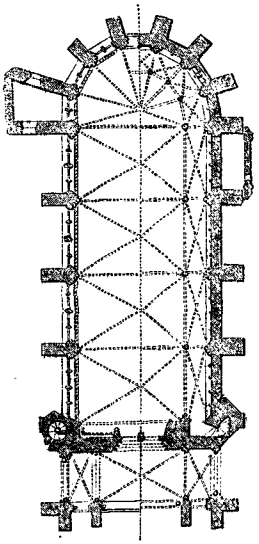
700. Ground Plan, Ely Cathedral. Scale 100 ft. to 1 in.

The presbytery of Ely is an exquisite specimen of the early pointed style of English art. The central part of that cathedral is perhaps the most beautiful and original design to be found in the whole range of Gothic architecture. In the year 1322 the old Norman tower that crowned the intersection of the nave and transepts fell down, and was rebuilt under the superintendence of Alan de Walsingham, at that time the sacrist. He, and he only of all the architects of Northern Europe, seems to have conceived the idea of getting rid of what in fact was the bathos of the style—the narrow tall opening of the central tower, which, though possessing exaggerated height, gave neither space nor dignity to the principal feature. Accordingly he took for his base the whole breadth of the church north and south, including the aisles, by that of the transepts with their aisles in the opposite direction. Then cutting off the angles of this large square, he

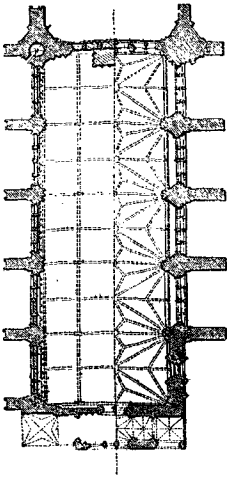
obtained an octagon more than three times as large as the square upon which the central tower would have stood by the usual English arrangement. This octagon was next covered with the only Gothic dome in existence, though Italian architects had done the same thing, and the method was in common use with the Byzantines. Unfortunately the roof, though in the form of a stone vault, is only constructed of wood like that at York. This was owing perhaps to the want of funds or of confidence. Perhaps at that time wooden roofs were even preferred to stone by the English, and the incongruity therefore did not offend. Be this as it may, the wonder is that when once this form was invented every Gothic edifice subsequently erected was not so arranged. It certainly was and is the feature most wanted to perfect the plans and to give the utmost effect to buildings of this class.

Besides the general beauty of design, the details of the octagon and of the three arches of the choir which were erected at the same time are equal to anything in Europe for elegance and appropriateness, and with the beautiful Lady chapel[1] of the same age make this cathedral quite a typical study of the architecture of the great Edwardian age.

As might be expected, *à priori*, the gem of English art was the chapel in the royal palace at Westminster. On this was lavished all that the metropolis could produce most exquisite in the arts of design, and this not in architecture only, but the best works of sculpture and the highest class of painting were put into requisition for its adornment.



701. Plan of Ste. Chapelle, Paris. Scale 50 ft. to 1 in.



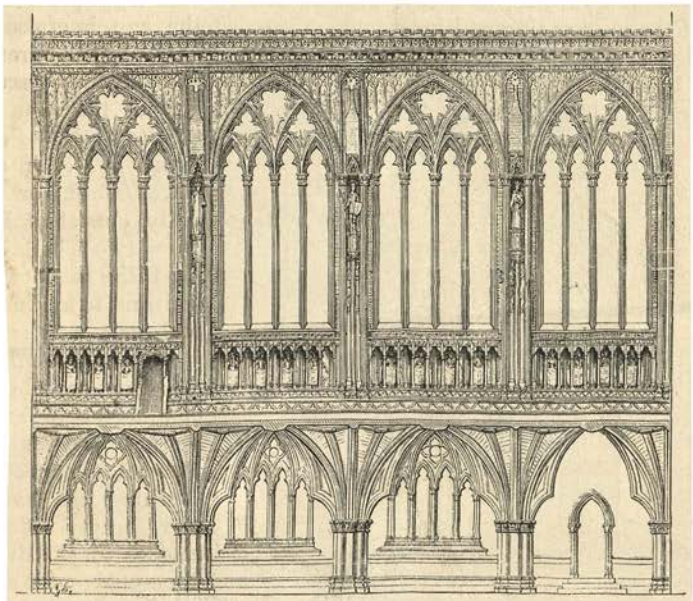
702. Plan of St. Stephen's, Westminster. Scale 50 ft. to 1 in.

[1] Is it quite clear that this building was originally designed as a Lady Chapel? might it not have been the Chapter House? In arrangement it is much more like the latter than the former.

The dimensions were not large, being only 90 ft. by 33 internally, and its roof was of wood, but so elaborate were its decorations that it must have cost more than many edifices three or four times its size. There can be no doubt that it was designed to surpass everything of the sort in England, and being erected wholly within the reigns of the three first Edwards it embraced the very best period of English art, answering to the Sainte Chapelle at Paris, which belongs to the great architectural age of St. Louis.[1] Yet all this has been ruthlessly destroyed to make way for the present unmeaning gallery that so unworthily occupies its place.[2]

As will be observed from the plans, drawn to the same scale, its dimensions were nearly identical with those of the Sainte Chapelle; the latter, however, having an apsidal termination, indispensable to a French church, is about 10 ft. longer internally. The right-hand side of both plans shows the vaulting of the crypts, and illustrates the immensely superior richness of the English vault. The roof of the English upper chapel being of wood, of course cannot be compared with the vault of the Sainte Chapelle, but the latter is infinitely inferior to that of the English crypt.

It certainly was not from motives of economy that the architects



703. Internal Elevation of St. Stephen's Chapel, Westminster.

[1] The date of the French Chapelle may be taken as 1242--1248, that of the English as 1292; but the works were not finished till 1348, or about a century after the French example had been complete in all essentials.

[2] A folio volume was published by the Office of Woods and Forests, professing to illustrate the building they were destroying, but it was so badly done that it was virtually useless. It adopts the absurd theory of two stories above the crypt, and is full of errors.

of this building designed for it a wooden roof, nor from any difficulty they could have had of vaulting so narrow a space. It must have been because they considered such a roof as they were prepared to make would be more beautiful in wood than in stone; in which probably they judged correctly. From what remains it can be seen that it was a hammer-beam roof, similar to that which was copied from it and now spans Westminster Hall; but it no doubt was much more elaborate and beautiful.

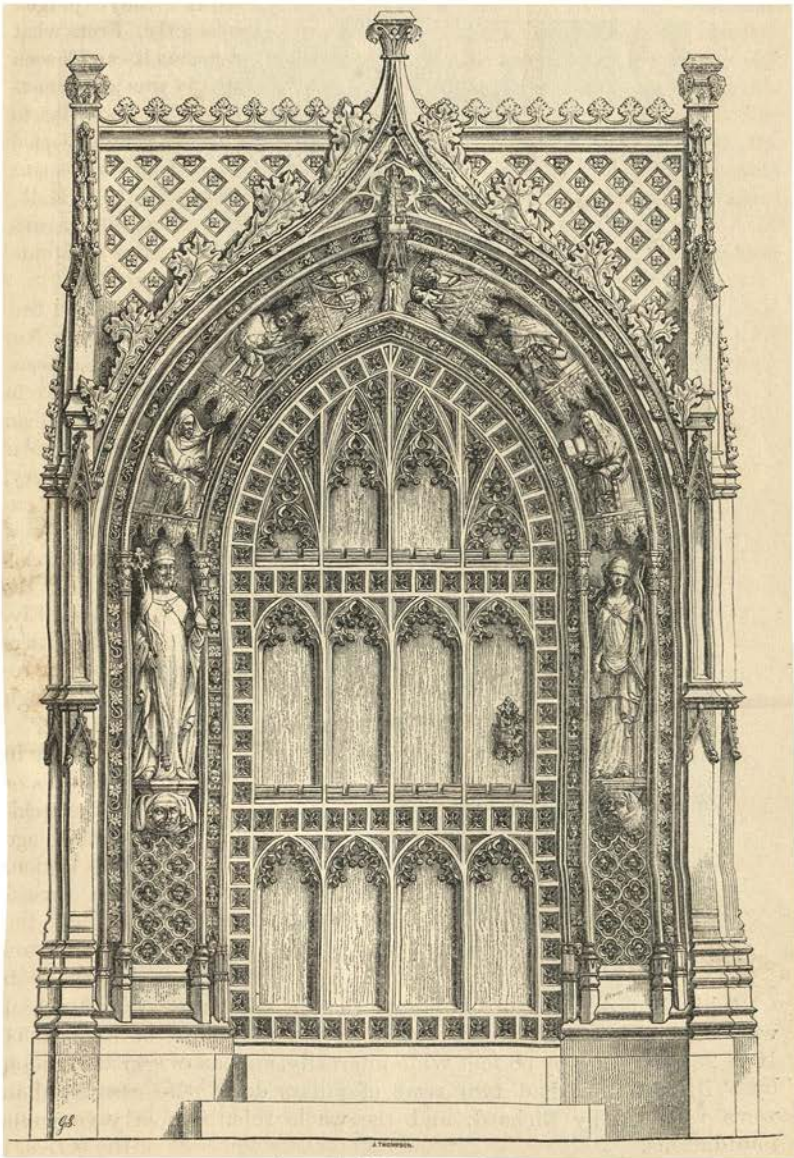
704. Waltham Cross.

The window tracery (woodcut No. 703) was of that beautiful style peculiar to the age, intermediate between the circular and flowing tracery, and of the same exquisite class now found in Merton chapel, Oxford, or the Lady chapel at Ely, the two buildings most like this now remaining to us, though both very inferior.

It was not only in the great churches or chapels that the architecture of this age showed its perfection. Nothing can exceed the beauty of the crosses which Edward I. erected on the spots where the body of Queen Eleanor rested on its way to London. One of these, Waltham Cross, is represented (woodcut No. 704). This, though not perhaps the best of the series, is quite equal to anything of its class found on the Continent.

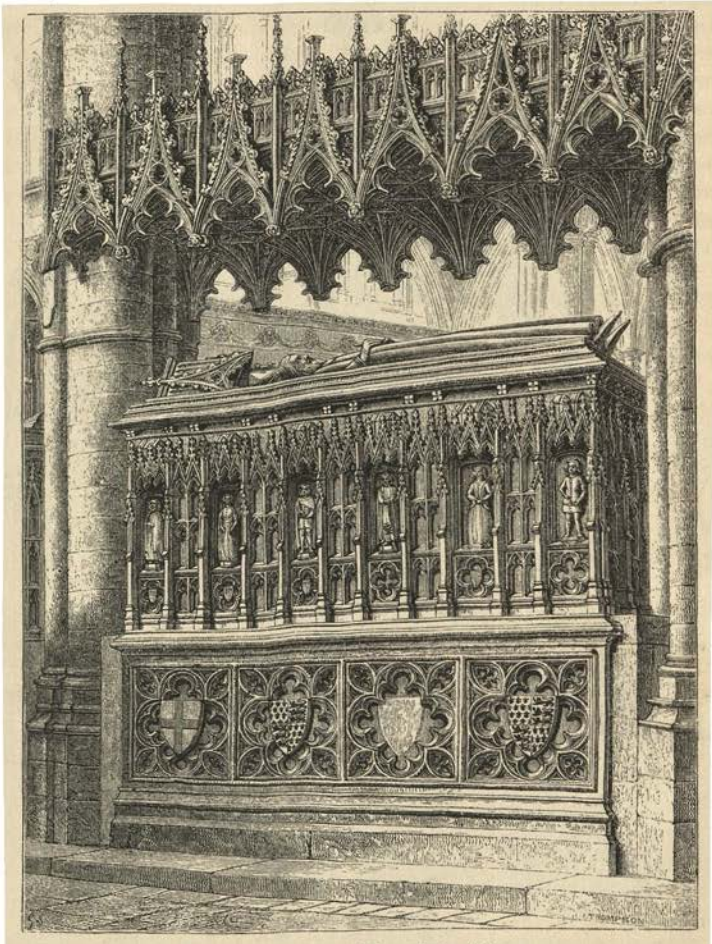
The doorway leading into the chapter-house of the cathedral at Rochester is a good specimen of the art of the next reign, having been erected, it is said, by Hamo de Hythe, confessor to Edward II., and displaying all the grace and beauty which characterised that age.

Another example is the tomb of Edward III. in Westminster



705. Doorway in Rochester Cathedral.

Abbey, erected immediately after his death. It betrays to a certain extent, in the smallness of its parts, the decline of art which was then taking place, but the canopy that surmounts it is equal in design to anything of the best age. It is of wood, in the carving of which the English architects always showed themselves superior to their rivals on the Continent.



706. Tomb of Edward III. in Westminster Abbey.

This is nowhere more apparent than in Westminster Hall, which was the one great building erected during the reign of Richard II. It is 238 feet long by 68 feet wide internally, and, as originally erected by William Rufus, had two rows of pillars down the centre; these were removed by Richard, and the whole rebuilt nearly from the foundations.

It is now roofed by 13 great ribs of timber, which are quite un-

equalled by any other ornamental trusses of wood-work employed for such a purpose. Even when viewed only as a scientific combination of timber, this roof is as good as anything that has been done in this engineering age. If more light were introduced between the timbers, which could be easily done by the employment of dormer windows, no roof could be more pleasing. It is the finest specimen of the purely English art of forming Gothic roofs of timber. As before remarked, this was hardly ever attempted on the Continent; though the English employed timber as frequently probably as stone, and very often with almost as good an effect, not only in their halls, but also in their cathedral churches, from the time of the Conquest to the Reformation. The mistake was mixing the two, or using one style for both. Had the English architects always employed timber, they would have created a new style, and it is hard to say whether it would not have been more beautiful than the other.

The roof of the hall at Eltham palace (woodcut No. 707) is another

707. Hall of Palace at Eltham.

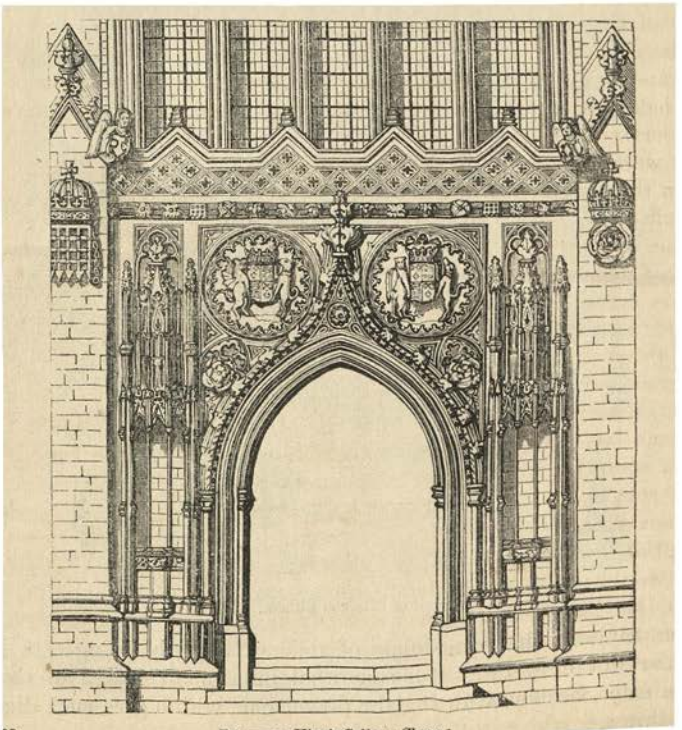
good example of the same class of roofing, though, being of a later age—that of Henry IV.—it is somewhat inferior in design to that at Westminster, besides wanting the dimensions which give such dignity to the latter.

During the period that elapsed between the reigns of the second and third Richards, the country was generally so troubled, and so occupied by foreign wars or domestic broils, that no very great works could be undertaken. Though many parish churches were erected, and repairs, sometimes rebuildings, were carried on to some extent in most of the large ecclesiastical establishments, it was the least active period, as far as building was concerned, which had occurred since the Conquest.

The history of the style in England closes most worthily with the completion of the three great royal chapels of the Tudor age. That at Windsor was commenced even before the age of Edward I. What we now see, however, belongs to a subsequent period, and the building was not completed till the reign of Henry VIII. King's College Chapel, though commenced by Henry VI., was not entirely finished till nearly a century afterwards, in 1530. Henry VII.'s Chapel belongs entirely to the reign of the king whose name it bears.

These chapels are infinitely superior to anything erected on the Continent at this time. Before they were finished the style in France had degenerated into mere prettiness, in Germany into extravagance, and in Italy the Renaissance had entirely obliterated all traces of Gothic design.

In England alone the style was still practised and retained its



708. *Doorway, King's College Chapel.*

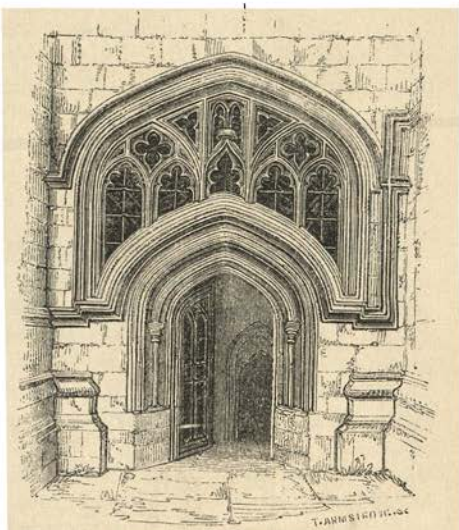
pristine vigour. Although the architecture of the Tudor chapels cannot be compared with the buildings of the three first Edwards either for boldness or elegance, it has beauties of its own which render it well worthy of admiration.

Foliage and sculpture had given way when these chapels were erected to the more mechanical form of decoration, and the endless repetition of the same parts. We miss in them entirely the poetry of earlier examples, and its place is but poorly supplied by the far greater mechanical dexterity which they display.

One of the characteristics of the Tudor style was the excessive use of panelling. The whole of the walls of these chapels internally is covered with it, and the windows consist merely of pierced panels. This, however, is managed with such taste throughout the chapel at Windsor, and in the clerestory, and at the west end of Henry VII.'s Chapel, that the effect is very pleasing; but at King's College the immense size of the windows, and their bad adaptation to the bays in which they are placed, render apparent all the defects of the style, and lay it fairly open to the reproaches which have been lavished upon it.

The most remarkable peculiarity of the Tudor style is the design of the vaults, which is of the kind called fan tracery, and is the most elaborate, perhaps the most beautiful style of vaulting ever invented, and so purely English that it will be desirable to reserve the description of it to a separate section devoted to explaining the peculiarity of English Gothic roofs.

The doorways of this style are frequently more picturesque and elaborate than the windows, owing probably to the circumstance that the windows were frames for painted glass, and nothing more, while the doorways, on the other hand, were entirely dependent on their architecture for their effect.



709. Doorway to Cloisters, Windsor.

The doorway of King's College Chapel (woodcut No. 708) is certainly the most pleasing part of the design, and nothing can well exceed the grace of that leading to the cloisters at Windsor (woodcut No. 709). It has neither sculpture nor foliage of any sort to aid its effect, but is nevertheless singularly appropriate and beautiful.

It would be impossible within the limits of this volume to attempt to describe, or even to enumerate, all the important edifices of the Gothic age which are found in every corner of the land. They are

perhaps more numerous than are to be found in France or in any country of Europe; for, though France can boast of 80 Gothic cathedrals, while we have scarcely more than one-fourth of the number, yet if we include the minsters, and the collegiate and abbey churches, we may nearly bring up our number to an equality. It is true most of the latter are in ruins, but still in such a state that we are perhaps better able to judge of their architectural effect than if they had been desecrated by the abominations of modern vulgarity.

If we take into account the parish churches, many of which in England are of great size, and quite equal in design to the cathedrals, there can be little doubt that the quantity of Gothic works in this country exceeds that of any other—or, to bring the assertion to a tangible standard, there can be little doubt that there are more windows filled with Gothic tracery in England than in France; and although it certainly must be admitted that the English cathedrals are far surpassed in size by many on the Continent, in excellence of art they are probably superior to those of France or any country in Europe.

Having now gone through the whole cycle of Gothic art, it may be as well, before leaving the last country where it was successfully cultivated, to pause and examine some of the more striking peculiarities of English architecture, and point out in what it differed from or resembled that of France.

CHAPTER II.

PECULIARITIES OF ENGLISH GOTHIC.

CONTENTS.

Vaults — Square Eastern Ends — Proportions — Sites.

VAULTS.

IT has been said that the part of Gothic churches in which the English architects were most generally successful was the formation of their vaults, and their mode of ornamenting them, in both which particulars they were quite unsurpassed by any nation of the Continent, and scarcely even approached. This arose partly from the circumstance that the English always worked within their strength, the French on the verge of their ability, and from the consequent power which this gave to the former of subordinating constructive necessities to architectural beauty. Thus the English architects never attempted a vault of any magnitude till they were sufficiently skilled in construction to do it with facility. In a former chapter it has been pointed out how various and painful were the steps by which the French arrived at their system of vaulting—first by pointed tunnel vaults and a system of domes, then by a combination of quadripartite and hexapartite intersecting vaults, of every conceivable form and variety, but always with a tendency to domes, and to the union of all pre-existing systems. This experimentalizing, added to the great height of their roofs, and the slenderness of their clerestories, never allowed of sufficient freedom to enable them to study æsthetics in this part of their construction.

In England, on the other hand, no attempt was ever made to vault the central aisle of a large church during the Round Gothic or Norman period, all our great churches having been designed for wooden roofs, as is easily seen from the construction of the piers. In the Abbey of Caen, for instance (woodcut No. 525), it is evident from the bases of the piers that vaulting shafts were attached alternately of greater and less strength, clearly prefiguring the form of the vault intended from the foundation. No instance of the kind occurs in England: though roofing shafts are sometimes attached to the front of the piers, they are so slight, and carried up so high, that with the form of the clerestories they clearly show that they were never intended to receive a stone vault, but merely the principal timbers of the roof. Durham seems to be almost the only exception to this. A vault was

always intended there, but it was not till the 13th century that the builders had skill or courage sufficient to erect it.

There can be but little doubt that this practice was derived from the antecedent Saxon period. There is no trace or tradition of a Saxon vault anywhere. There are, on the contrary, many reasons for believing that not only the roofs, but the walls of many of these cathedrals, and most of the smaller churches, were wholly of wood. Being thus made familiar with this mode of construction, the Norman builders were in no hurry to adopt the false stone ceiling of the French. When they did undertake this, the experience obtained from the wooden roofs enabled them to surpass their masters in their own art. It first gave them the straight ridge rib which forms so beautiful a back-bone to all English vaults, and the want of which, as before remarked, is the cause of that appearance of weakness so common in French roofs. It also induced them to give far more depth and projection to the ribs and framing of their vaults; for being accustomed to greater depth and boldness of timber construction, their eyes could not tolerate the thin lines of the French *ogives*, or angle ribs, just sufficient for strength, but sadly deficient in expression, and in play of light and shade.

The same experience was also the cause of the cross-framings of the ribs, and of the introduction of all that network of riblets and ornaments which gives such character and beauty to English vaults. Still more certainly it gave rise to the profuse employment of sculptured bosses and carved ornaments, all which are quite peculiar to this country, and betray their wooden origin in a manner not to be mistaken. It is curious to observe that even as late as the Tudor age, this influence of wooden construction was not lost on the formation of vaults. Such an example as that represented in woodcut No. 710, from the roof of Oxford cathedral, might with propriety be called a hammer-beam vault, being in fact a copy in stone of that form of roof which covers Westminster Hall. The roof of the schools at Oxford also belongs to the same class.

710. Roof of Choir, Oxford Cathedral. From Britton's Cathedral Antiquities.

A Gothic vault depends for its preservation wholly on the wooden roof that covers it. Remove this, and in a few years exposure to the weather destroys a structure never meant to be so exposed. On the other hand, it must be recollected that the thrust of the vault is always tending to tear the edifice in pieces, and that more than half the expense of a Gothic church is caused by the necessity of counteracting this

thrust. It becomes very questionable whether the space, the lightness, and the constructive propriety that would have been attained by the omission of the false ceiling, would not have given rise to far more beauty than was obtained by its adoption. It is perhaps too late to try and settle the question now, as the experiment has never been fairly made. Be this as it may, it is quite certain that one of the practices adopted by the English architects, under foreign influence, was as great a mistake as could be committed—that, I mean, of forming imitation stone vaults entirely of wood. As before mentioned, York is so roofed, so is the choir of Winchester, and, worse than either, so is the splendid octagon at Ely.

Some have supposed that these were merely temporary expedients, and that it was intended to replace them at some future period by stone roofs in the same forms. I am much more inclined to consider them merely as a mode in which the English carried out a foreign invention, which had in process of time come to be considered an indispensable part of every first-class church. One of their own beautiful timber roofs would have been preferable, but even in the middle ages some mistakes were made.

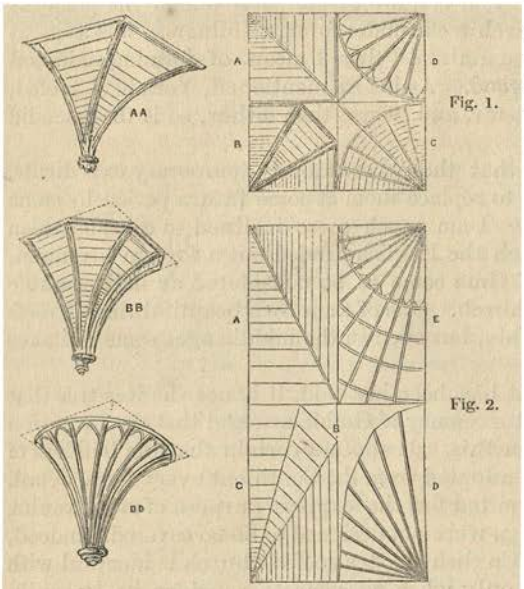
Notwithstanding what has been just said, it is not the less true that the vaulting was the first exigency of Gothic art, and that the invention of all the parts arose from this. It appears certain that the builders of the old English churches adopted from the Continent every form, detail, and even ornament, invented for the express purpose of stone vaults, though their own buildings were not designed to be so covered. Indeed, up to a certain point, an English wooden-roofed church is identical with a vaulted one; and it is only when we come to consider its strength, and to calculate its power of resisting thrusts, that we become assured that no vault was intended.

Beautiful therefore though the stone vaults of early English architects undoubtedly are, it is perhaps after all to be regretted that they did not work out their own system in their own manner. It is more than questionable whether, if the same money had been spent on timber-roofed cathedrals that was spent on those with vaults, the result would not have been more satisfactory. The gain in dimensions would at once have enabled English architects to surpass all Continental examples, the stability and propriety of the buildings would have been greater, and it is very questionable if they would have lost anything in beauty. Could they have had real stone roofs, as at Roslyn, the case might be different, but the combination of stone and timber is certainly a mistake; and, as was said before, the roof of Westminster Hall is as noble a thing as any vault in the kingdom, and if raised 50 or 60 ft. higher, and properly lighted, would have made a nobler nave than any which we possess.

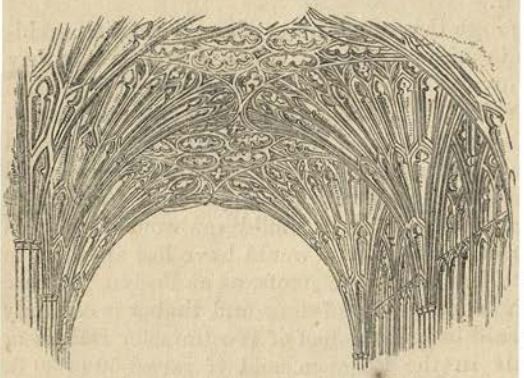
The system of fan-vaulting is as peculiar to English architecture as the wooden roofs, and is so beautiful that it may be well to explain its origin and peculiarities.

The original form of the intersecting vault is that of two halves of a hollow-sided square pyramid placed opposite one another in an in-

verted position,[1] as represented at A and A A (woodcut No. 711, fig. 1). The English seem early to have been tired of the endless repetition of these forms, and after trying every mode of concealing their sameness by covering them with tracery, they hit on the happy expedient of cutting off their angles, as shown in woodcut No. 711, and at B and B B. This left a flat square space in the centre of the vault, which would have been awkward in the central vault, but in a side aisle was easily got over, and its flatness concealed by ornament. Arrived at this stage, it was easy to see that by again dividing each face into two, as at C, the principal original lines were restored, and the central space could be subdivided by constructive lines to any extent required. By this process the square pyramid had become a polygonal cone of 24 sides, which was practically so near a circle that it was impossible to resist the suggestion of making it one, which was accordingly done, as shown at D and D D.



711. Diagrams of Vaulting.

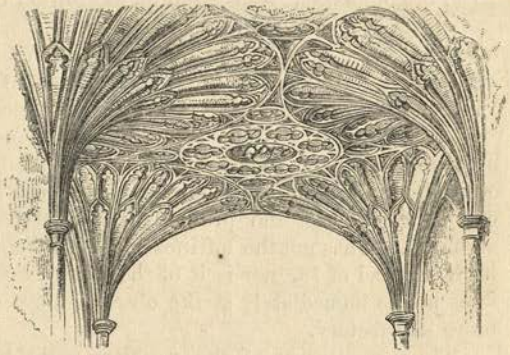


712. Roof of Cloister, Gloucester. From Britton.

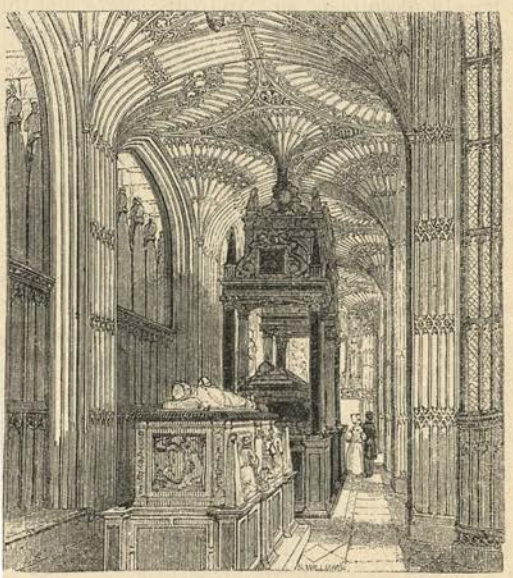
So far all was easy, but the difficulty of the flat central space resting on the four cones was still felt to be a defect, as indeed is apparent in such a vault as that of the cloisters at Gloucester (woodcut No. 712), where a segment is used nearly equal to that of an equilateral spherical triangle. There they did not dare to employ a constructive decoration, but covered the space with

[1] This has already been explained in the chapters on French architecture, especially at pages 647 and 702.

circles so as to confuse and deceive the eye. At Windsor the defect was obviated by using a low four-centred arch invented for the purpose, so that the outer tangent of the conoid was nearly flat, and the ribs could be carried to the centre without being broken, as is shown in woodcut No. 713. This may be considered the perfection of this kind of vaulting, and is perhaps the most beautiful method ever invented. At Westminster the difficulty was got over by reversing the curve by the introduction of pendants. This was a clever expedient, and a startling effect is thereby produced, but it is so evidently a *tour de force* that the result is never quite satisfactory; still on a small scale it was admissible.



713. Vault of St. George's Chapel, Windsor. From Britton.



714. Aisle in Henry VII.'s Chapel, Westminster.

These devices all answered perfectly so long as the space to be roofed was square, or nearly so; but when this mode of vaulting came to be applied to the bays of the central aisle, which were twice as long in one direction as in the other, the difficulties seemed insuperable. By cutting off the angle as in the former instance (as at B, fig. 2, woodcut No. 711), you may get either a small diamond-shaped space in the centre or a square, but in both cases a very awkward pyramid; and carrying on that system to the curvilinear, you never arrive at a circle, but at an elliptical section, as shown in woodcut No. 711, at D, fig. 2.

The builders of King's College Chapel strove to obviate the difficulty by continuing the conoid to the centre, and then cutting off what was redundant at the sides, as in E, fig. 2.

The richness of the ornaments, and the loftiness and elegance of the whole, lead us to overlook these defects, but nothing can be less constructive or less pleasing than the abruptness of the intersections so obtained. At Westminster it was avoided by a bold series of pendants supported by internal flying buttresses, producing a surprising degree of complexity, and such an exhibition of mechanical dexterity as never fails to astonish, and is generally pleasing, though it must be confessed that it is at best a mere piece of ingenuity very unworthy of English art. By far the most satisfactory of these roofs is that at Windsor, where a broad flat band is introduced in the centre of the roof, throughout the whole length of the chapel. This is ornamented by panelling of the most exquisite design, and relieved by pendants of slight projection, the whole being in such good taste as to make it one of the richest and probably the most beautiful vault ever constructed. It has not the loftiness of that at Cambridge, being only 52 ft. high, instead of 78, nor is it of the same extent, and consequently it does not so immediately strike observers, but on examination it is far more satisfactory.

The true solution of the problem probably lay in a return to the hexapartite vault, from which the first constructors started, using alternately plain piers and vaulting-shafts, and throwing two bays of the side aisles into one of the centre. This might have somewhat shortened the apparent length of the building, but it would have afforded a pleasing variety of effect, and have allowed of fan vaulting being carried to its legitimate extent, and would have produced results probably more beautiful than any yet attained.

Square Eastern Terminations.

Another peculiarity of English design which requires to be pointed out before proceeding further, is that of terminating their cathedrals and churches to the eastward with a flat wall, instead of the apse or chevet which is so universal on the Continent. There are some exceptions abroad, such as Poitiers, Laon, and others; and in like manner we have some chevets here, as at Westminster, Tewkesbury, and elsewhere; but these, on both sides, are the exceptions, and are not sufficiently numerous at all to affect the rule. It must be observed that most of the Norman churches had originally apses, and some of them, as Norwich, Canterbury, and others, had apsidal chapels, which, if not identical with the French arrangement, are still so like it as to be classed in the same category. As soon as the English began again to feel their own independence, and to think for themselves, they abandoned wholly this form, and, with the rarest possible exceptions, adopted a mode of finishing their churches towards the east different from that adopted by any other nation. It is by no means clear whether the square east end was frequent or not in Saxon churches. We have no actual evidence for such a supposition, but it is rendered probable by the fact, that as soon as the Norman influence began to wane, the English made great haste to abandon the circular form, and for a reason which it does not seem difficult to divine.

It will be recollected that the original use of the apse in the early church was as a place for the bishop's throne, where he sat supreme above his presbyters, before all the people. On the Continent, where churches existed in which this ceremonial had been practised, the apse became sacred and symbolical. In England it was established after the custom had fallen into disuse, and this part of the ceremonial of the basilica was transferred to the chapter-house, which thus took the place of the apse, and became the diocesan parliament-house, where the bishop or abbot met his subordinate clergy, not to rule and command, but to consult and deliberate for the common weal. These local parliaments were from the earliest age as essential parts of the institutions of the Anglo-Saxon race as the imperial parliament now is. From this cause the circular or polygonal building, from being a baptistery or tomb-house, became in England the council-chamber, adopting exclusively the third reason alleged as among those which induced Cuthbert to erect his baptistery at Canterbury.[1]

On the Continent, it is true, there are chapter-houses to be found, generally square rooms with wooden roofs, and not remarkable for their architecture. In England the chapter-house is an absolutely indispensable part of any extensive ecclesiastical establishment, and in almost every case is more carefully designed and more elaborately ornamented than the church itself, its only inferiority being in size.

The Norman chapter-houses of Bristol, Durham, and Worcester, and the splendid Gothic buildings of this class at Wells, Lincoln, Salisbury, Lichfield, and Westminster, with such gems as those of Southwell and Hexham, include much of what is most elegant in design and most beautiful in detail in the architecture of England. Indeed a monography of these peculiarly national edifices would give a higher idea of the art as practised by our forefathers than even the churches themselves to which they were attached.

Whether this transference of the apse to a separate edifice was an improvement or not, is a question more open to discussion. Our only great chevet is that of Westminster Abbey, the design of which is perhaps imperfect from inexperience, and its effect is certainly not equal to the glorious wall of painted glass that closes the vista at York or Carlisle, and which once closed that of Lincoln, nor does it surpass in fanciful beauty the arrangements of Wells or Salisbury. To give to a chevet its full value, the church should be short and wide, and the side aisles high—indeed exactly the opposite of our style of building. It probably was the perception of this on the part of the architects, together with the want of all feeling for its symbolical use, that led to this mode of termination being so universally abandoned in England.

There are many minor peculiarities which might each be separately dwelt upon, were it worth while to draw a complete parallel between the French and English Gothic styles. The fact is, their modes of architecture were as dissimilar as the tastes and dispositions of the two nations were antagonistic to one another.

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[1] See p. 844.

How far they differed will be seen at a glance on comparing such a plan, for instance, as that of Norwich cathedral (woodcut No. 687) with any of those of the Continental examples quoted in the previous pages. It will be seen how immensely long this church is in proportion to its other dimensions. In this respect it is typical of all English examples, as compared with the cathedrals of any other country. So universal is this even in Norman buildings, that there can be little doubt that the Saxon churches had the same tendency, and that from them it was applied to those erected after the Conquest. As a general rule it may be said that length is the characteristic of English and height that of French cathedrals. The English architects always strove after the first, even at the expense of other obvious means of effect. The French, on the contrary, sacrificed everything to obtain height, which they considered the true element of sublimity. With some it may be a matter of doubt which is the best system, but there seems no reason for hesitation in declaring in favour of the English, if either extreme is to be adopted, although, as in most cases, a mean between the two would perhaps be preferable to either.

It cannot of course be doubted that of the three points of length, breadth, and height, the last is, generally speaking, the most obvious element of sublimity, externally at least, and internally also, where the other parts are in proportion; but it is easy to make an apartment so high as to dwarf all the other dimensions, and render it positively ugly. Owing to their excess of height, the French cathedrals always appear short, and, what is worse, there is generally a look of frailty about them, an impression either that all is not quite safe, or that stability is attained by some extraordinary trick of construction or concealed power. This is never the case in England. There is always a look of solidity and calm repose about our cathedrals that quite satisfies the mind; and, next to actual size, there are no elements of architectural grandeur so important as solidity and apparent durability. These we miss wholly in such a cathedral as Beauvais, and even Amiens is not satisfactory in this respect. Rheims and Chartres come nearer to the English standard, but even they are less substantial than almost any English example that could be quoted. The Egyptians carried to excess the love of massive construction, it being their principal element of grandeur; and though it would be absurd to adopt their principle to its full extent, the other extreme, to which the German and later French architects carried their cleverness, is one of the greatest mistakes ever committed in art. This the English always avoided. At the same time the proportion of height to width in English cathedrals is generally pleasing; both height and width are always sufficient to give value to the length without being overpowered by it, and the furniture of the churches is always appropriate and in due proportion; while, on the Continent, these objects often look like toys. On the whole, the sentiment of sublimity felt on entering an English cathedral, arising from the great length of its long-drawn aisles, from the multiplicity of repeated parts, and the unity given by those that are open and those that are enclosed, is perhaps quite as impressive as that

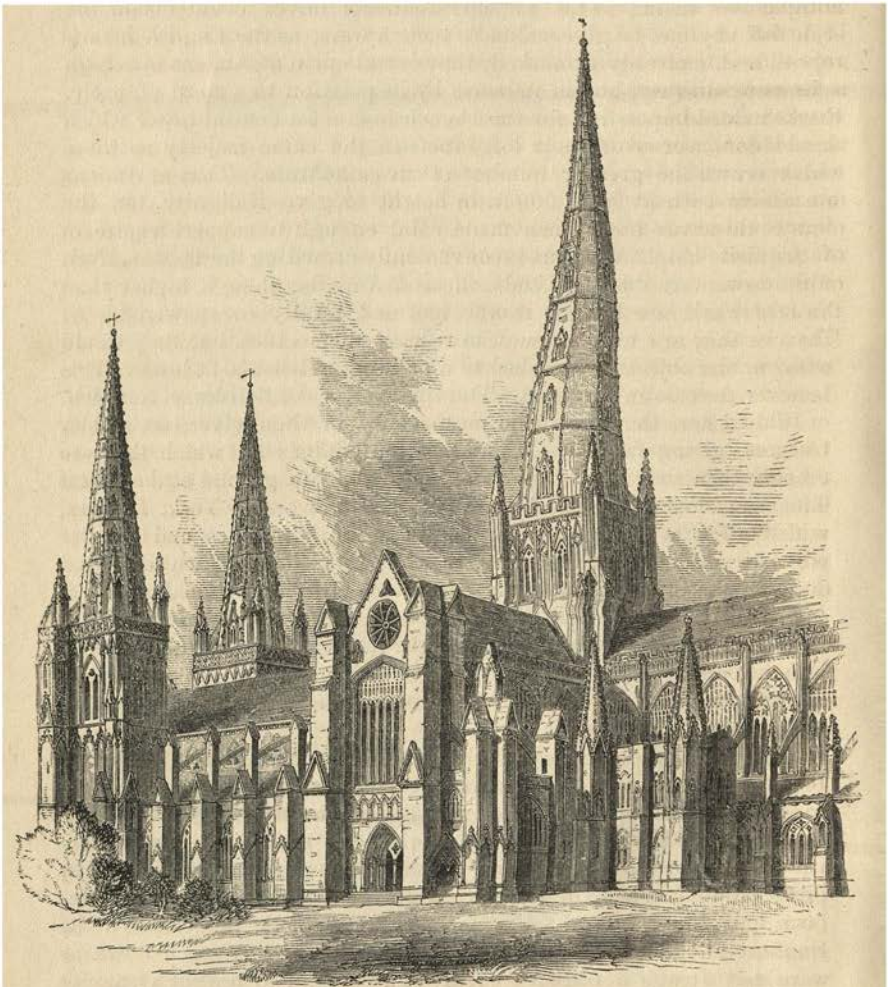
produced by the height of the French examples, in many cases probably more so.

Again, as regards the exterior, the English method, if fairly weighed, will be found even more satisfactory. French cathedrals always appear short externally, and their enormous roofs overpower and crush everything below them. The French architects never could obtain the beautiful skyline, or give value to their towers, as the English invariably did. As already remarked, the central spire at Amiens is as high as that of Salisbury, but is reduced by its position to a mere pinnacle. It was indeed impossible for the French to erect a central tower which should domineer over their lofty roofs in the same majesty as those which crown the greater number of our cathedrals. That at Amiens must have been at least 600 ft. in height to give it dignity, but the piers could never have been made solid enough to support a spire of the requisite height without inconveniently crowding the floors. Even of the towers at the west ends, those at Amiens, though higher than those of York, are buried in the roof and totally overpowered. At Chartres they are high enough to redeem themselves, but they would be far nobler objects if attached to a building at least 50 ft. lower. This is never the case in England. The single spires of Salisbury, Norwich, or Chichester, though by no means lofty in themselves, are nobler features, giving far more dignity to the edifices on which they are erected than they would give if standing on the ground at their west ends, as at Friburg or Mechlin. The three towers of York, Lincoln, and Wells form groups far more beautiful in themselves, and in better proportion to their substructures, than anything the Continent can boast of, while the three spires of the little cathedral at Lichfield are absolutely unrivalled among compositions of this class. Its central spire is 252 ft. in height, the western spires 192 ft., yet they are so beautifully proportioned to one another, as well as to the building to which they belong, that they are far more effective than any similar examples on the continent of Europe.

Another advantage the English architects gained from the great length and moderate height of their cathedrals, was the power of projecting their transepts so as to give the greatest possible variety to their outline, and a play of light and shade perfectly unrivalled. In most instances the French kept the line of their transepts actually within that of the side aisles, and their best examples are those where, as at Bourges (woodcut No. 555) or Bazas (woodcut No. 554), they omitted the transept altogether, or others where they kept it as much down as possible. It was a blunder worthy of a German to project a transept two bays in so short a cathedral as that at Cologne; but the English could extend them to three or four bays, and even use two transepts—could indeed play with their outline as they chose, and still the building never appears too short, or in any way out of proportion.

Again, a great charm of English cathedrals is their repose of outline. A French cathedral is surrounded by a multitude of pinnacles, flying buttresses, and other expedients to keep the building from falling. It is true that these objects were made ornamental; but though it is

vicious to conceal construction, it is bad architecture to let the devices of construction predominate over the actual outline of the main building itself. Not only does it suggest weakness, but it produces a flutter and perplexity that never is nor can be satisfactory. These faults are as usual exaggerated at Cologne, but almost all French cathedrals exhibit



715. View of Lichfield Cathedral. From Britton's Cathedral Antiquities.

them, though to a less extent. It would be difficult to find a single instance of these faults in England. The pinnacles and buttresses seem always put there more for ornament than for any other purpose, and as if to suggest the idea of superabundant strength rather than to counteract apparent weakness. The walls always seem to suffice, and these to be merely adjuncts.

All this exemplifies the observation made above, that the French were always working up to the limits of their strength, always trying to make their piers as light, their windows as large, and their vaults as high as possible, doing all they could, and striving to do more; while the soberer English architect, on the contrary, attempted nothing over which he had not full command. Hence we find the one style full of mere tricks and *tours de force;* in the other a character of repose, and, considering their relative dimensions, generally speaking a far more satisfactory architectural effect. In comparing French with English cathedrals, this remarkable contrast in their respective dimensions should always be kept carefully in sight. Thus in the two contemporary cathedrals of Salisbury and Amiens, so often compared with one another, their length is very nearly the same, but the French church covers 71,000 square ft., the English only 55,000. The vault of the first is 152 ft. in height, the latter only 85. Altogether the cubic contents of Amiens are at least double those of Salisbury, and the labour and cost bestowed upon it must have been more than double. Thus in making a comparison between the two, the fair mode is to ask whether the cathedral of Amiens is finer than Salisbury would be if at least twice as large as it is.

In like manner, in comparing the design of Lichfield with that of Cologne, we must recollect that the one covers 82,000 ft., the other only 34,000. The vault at Cologne is 152 ft. high, that at Lichfield only 55. The beautiful western spires of the latter are of the same dimensions with the four pinnacles that crown the western towers of the former, where the square changes to an octagon. The question is, would the design of Lichfield, if magnified four or five times, be as beautiful and as sublime as the great German cathedral? As it is, it requires all the magnitude of the latter to enable it to compete with so thoroughly artistic a group as that shown in woodcut No. 715; and there is hardly a single English cathedral which does not possess this beauty of outline in a greater or less degree. I feel convinced that, had our architects had the same advantages as were possessed by their Continental brethren, they would have surpassed as they now rival them. The great merit and the great secret of French architecture, as practised in the 13th century, is, that it is original; and the architects, uninfluenced by precedent, were doing the best they could to attain a perfectly definite aim, and doing this with an earnestness that has never been equalled, and on a scale that has seldom been surpassed. The English, on the other hand, did not invent the style, and consequently were never quite free from foreign influence, but they applied it after a manner of their own, with a propriety and an elegance which, considering the scale of their buildings, render theirs perhaps the most pleasing and harmonious, and also the most picturesque, of all the varieties of the Gothic style.

In one other respect the French architects were very much more fortunate than their English competitors, inasmuch as all their greatest and best cathedrals were built, as they express it, *d'un seul jet*, having been completed, in all essential parts, within a century from the time

at which they were commenced. That period too was their greatest epoch, the glorious 13th century. The erection of our English cathedrals, on the other hand, generally dragged on through two or three centuries. Many have their naves and transepts of various architecture, and exhibit examples of almost every style, from the introduction of the pointed arch till its decline under the Tudors. This gives them a certain degree of historical interest, and also in some instances a picturesqueness of effect, the value of which cannot be denied, but it destroys their value as architectural compositions, and prevents their competing on anything like fair terms with the great Continental examples. The exception to this rule is Salisbury, but unfortunately it was erected just after the pointed style had been introduced into this country, and when its principles or details had not been fully mastered, nor worked into the system of English art so as to enable it to take its place as an independent style. The consequence is that Salisbury is one of the leanest and poorest of our cathedrals, and notwithstanding an undeniable elegance of form, perhaps the one least capable of bearing a comparison with Continental rivals.

Among the differences between the French and English architects there is none more remarkable than the feeling for the picturesque that always guided the latter, while it can hardly be traced in the works of our Continental neighbours. The variety of plan and outline just pointed out is the most obvious manifestation of this good taste, as far as the building itself is concerned, but it is even more remarkable in the choice of the site and the arrangement of the accessories. Nothing, for instance, can be more commandingly placed than Durham and Lincoln, nothing more beautiful than even the lowly situations of Wells and Salisbury; and even in spite of all that modern vulgarity and bad taste have done to spoil the works of our forefathers, almost all our cathedrals still retain spots of green and alleys of tall trees, which, grouping so pleasingly with the towers and spires, give such value and beauty to the architecture. As a general rule they stand on the very outskirts of the town, either overlooking it from a height or nestled down on the banks of some little streamlet of pure water.

French cathedrals, on the other hand, always stand in the market-place in the very centre of the town, with no grass-plot in front, and no room for a park-like scene on any side. They are often too surrounded by shops and hovels, built up even against their walls, and this not in modern times, but frequently these abominations are coeval with the cathedral itself, and seem never to have been objected to; nor do I know in all France or Germany of one single instance of that *religio loci*, that hallowed *temenos*, which is so marked a feature of the precincts of our English cathedrals. The fact is, the English were always lovers of the picturesque, and English architects always more or less landscape gardeners. The French, on the contrary, are almost totally deficient in this taste. With them the town is everything, the country and all belonging to it being altogether secondary. This is a distinction which it is necessary to bear in mind in judging of their architecture, for our outlines and our forms would lose half their value

if placed in narrow streets and crowded thoroughfares, while a French cathedral standing in a park would be a gigantic deformity, disfiguring rather than adorning a scene to which it would be so ill suited. It should be placed among tall houses, and so that its whole outline can never be grasped at one glance. Trees are, on the other hand, almost an indispensable complement to English architecture, and it is only at a distance that we can appreciate all the variety and picturesqueness of the outlines of our best churches.

COMPARATIVE TABLE OF ENGLISH CATHEDRALS.[1]

	Area.	Length inside.	Western Towers.	Central Towers.	Height of Nave.	Height of Choir.	Width of Nave.	Width of Choir.	Width of Central Aisle.	Approximate ratio of Height to Width.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	
York	72,860	486	196	198	93	101	106	102	51	1 to 2
Lincoln.. ..	66,900	468	206	258	82	71	80	81	39	1 2
Winchester ..	64,200	530	..	140	76	..	85	..	35	1 2·43
Westminster..	61,729	505	220	..	103	..	75	..	35	1 3
Ely	61,700	517	215	170	72	70	75	..	34	1 2·1
Canterbury ..	56,280	514	152	229	80	70	73	85	33	1 2·4
Salisbury ..	55,830	450	..	404	84	..	82	..	35	1 2·3
Durham ..	55,700	473	164	216	74	..	81	77	32	1 2·3
Peterborough	50,516	426	154	143	78	..	79	..	36	1 2
Wells	40,680	388	125	165	67	..	69	..	34	1 2
Norwich ..	40,572	408	..	309	73	..	70	..	26	1 2·8
Worcester ..	38,980	387	..	191	66	..	78	..	32	1 2·45
Exeter	35,370	383	..	..	70	..	72	..	34	1 2·1
Lichfield ..	33,930	319	192	252	55	..	66	..	28	1 2

[1] It is not pretended that this Table is quite correct in all details, but it is sufficiently so to present, at a glance, a comparative view of the 14 principal churches of England, and to show at least their relative dimensions.

CHAPTER III.

ARCHITECTURE OF SCOTLAND.

CONTENTS.

Affinities of Style — Early Specimens — Cathedral of Glasgow — Elgin — Melrose — Other Churches — Monasteries.

CHRONOLOGY.

		DATES.			DATES.
Malcolm Canmore.	Accession	A.D. 1057	David II.	Accession	A.D. 1329
David I.	„	1124	Robert II., Stuart	„	1371
William the Lion	„	1165	James I.	„	1406
John Baliol	„	1292	Mary Queen of Scots	„	1542
Robert Bruce	„	1306			

The architecture of Scotland differs from that of England in so many essential particulars, that it is necessary to treat the northern part of the island as a totally distinct architectural province. Though so near a neighbour, and so mixed up with England in all the relations of war and peace, the Scotch never borrowed willingly from the English, but, owing probably to the Celtic element in the population, all their affinities and predilections were for Continental nations, and especially for France. So completely is this the case that there is scarcely a single building in the country that would not look anomalous and out of place in England; and though it is true that the edifices are not entirely French in design, the whole taste and character of them is Continental, though wrought out in a bolder, and generally in a simpler and ruder fashion than the corresponding examples in other countries.

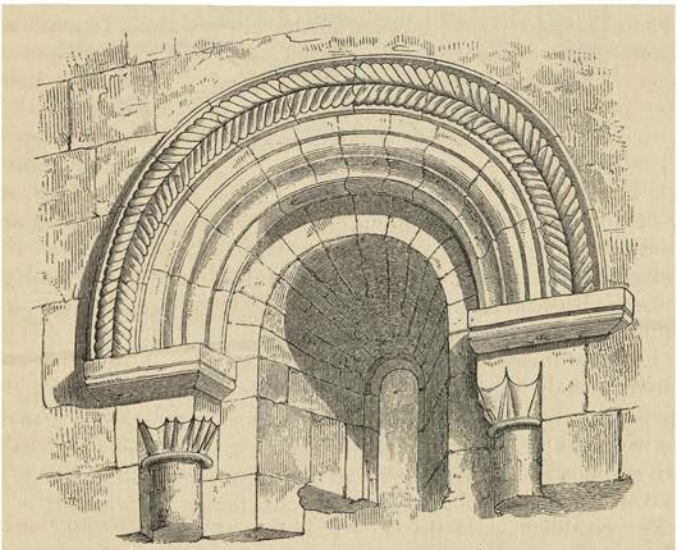
Gothic architecture first appeared in Scotland in the 11th century. At that time the country was in a most uncivilized state, and the specimens are few and of the rudest description. In the 12th century, when the style was somewhat more developed, it resembles much more what is found at Trondhjem in Norway than anything at Caen or in the South of Europe.

The buildings of David I. gave an immense impulse to the Round-arched style, which continued for nearly a century after his time, and long after the pointed arch had been currently used in the South. It is true we find pointed arches mixed up with it, as at Jedburgh, but the pillars and capitals are those of the earlier orders; and the circular arch continued to be used from predilection wherever the constructive necessities of the building did not suggest the employment of the pointed form.

The one thing which the Scotch seem to have borrowed from the English is the lancet form of window, which suited their simple style so completely that they clung to it long after its use had been abandoned in England. This circumstance has given rise to much confusion as to the dates of Scottish buildings, antiquarians being unwilling to believe that the lancet windows of Elgin and other churches really belong to the middle of the 14th century, after England had passed through the phases of circle and flowing tracery, and was settling down to the sober constructiveness of the perpendicular.

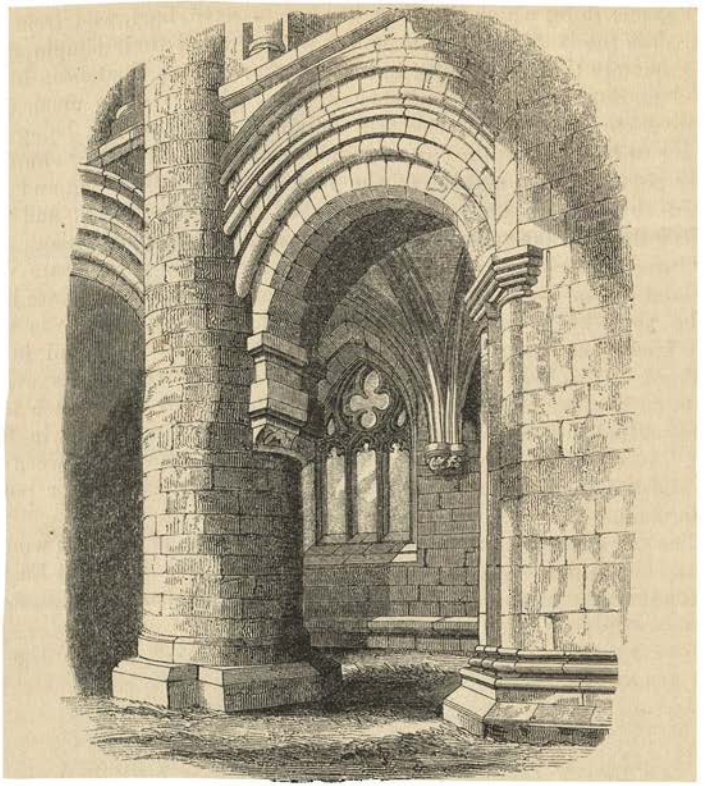
Owing probably to the little leisure allowed by the wars with England during the reigns of the three first English Edwards, we have in the North hardly any traces of their style. Circle tracery is very little known, and English flowing tracery hardly to be found in all Scotland. It is true that a class of flowing tracery occurs everywhere in Scotland, but it is, both in its form and age, much more closely allied to French flamboyant than to anything found in England. It was used currently during the whole period between the 2nd and 3rd Richards, and even to the last during the Tudor period of England.

The one great exception to what has been said is the east window of the border monastery of Melrose; but even here it is not English perpendicular, but an original mode of treating an English idea, found



716. Window, Leuchars. From a drawing by R. W. Billings.[1]

[1] The illustrations in this chapter being taken from the beautiful work by R. W. Billings, entitled the Baronial and Ecclesiastical Antiquities of Scotland, the authorship of each will not be mentioned, except when it forms an exception to this rule. Mr. Billings's work is certainly the most correct and beautiful that has yet appeared on the subject, and if completed with the necessary plans and architectural details, would be unrivalled as a monography of an architectural province.



717. Pier Arch, Jedburgh. R. W. B. del.

only in this one instance, and mixed up with the flowing tracery of the period.

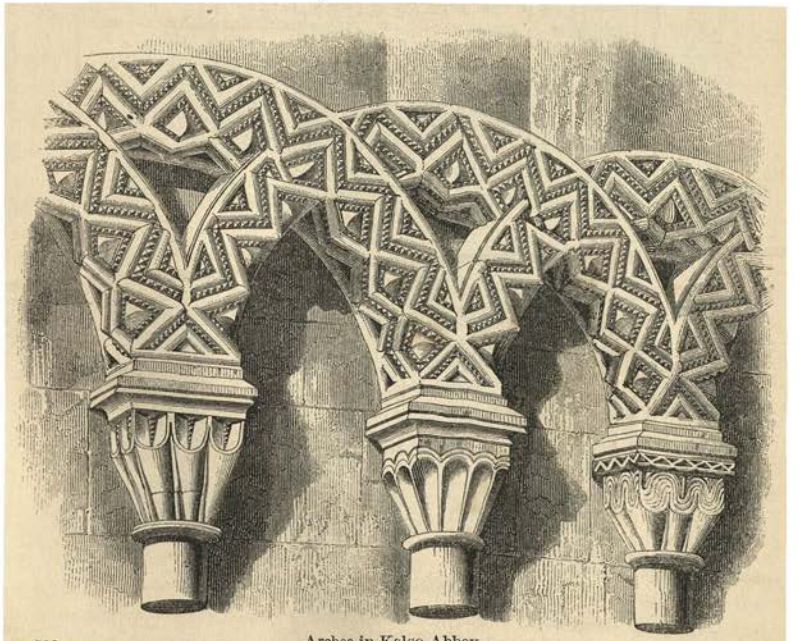
There is no trace of Tudor architecture in Scotland; neither the four-centred low arch nor fan-vaulting are to be found there, nor that peculiar class of perpendicular tracery which distinguished the 16th and 17th centuries in the South. At this period the Scotch still adhered to their flamboyant style, and such attempts as they did make at perpendicular work were so clumsy and so unconstructive that it is little wonder that, like the French, they soon abandoned it.

In so poor and thinly populated a country as Scotland was in the 11th century it would be in vain to look for any of the great ecclesiastical establishments that are found in the South. The churches seem at this age to have been cells or small chapels, such as that at Leuchars or Dalmeny, closely resembling St. Clement's church at Trondhjem, and a little larger than the contemporary edifices so frequently found in Ireland.

Leuchars is perhaps the most characteristic and beautiful specimen of its class, of which, like the contemporary chapel at Cashel, which it much resembles, it may be considered as the type. Its details are

not only rich, but, as may be seen from woodcut No. 716, bold and elegant at the same time. Both internally and externally the ornament is applied in so masterly a manner that the beauty of the art makes up for the smallness of dimensions, and renders it one of the most interesting churches in Scotland.

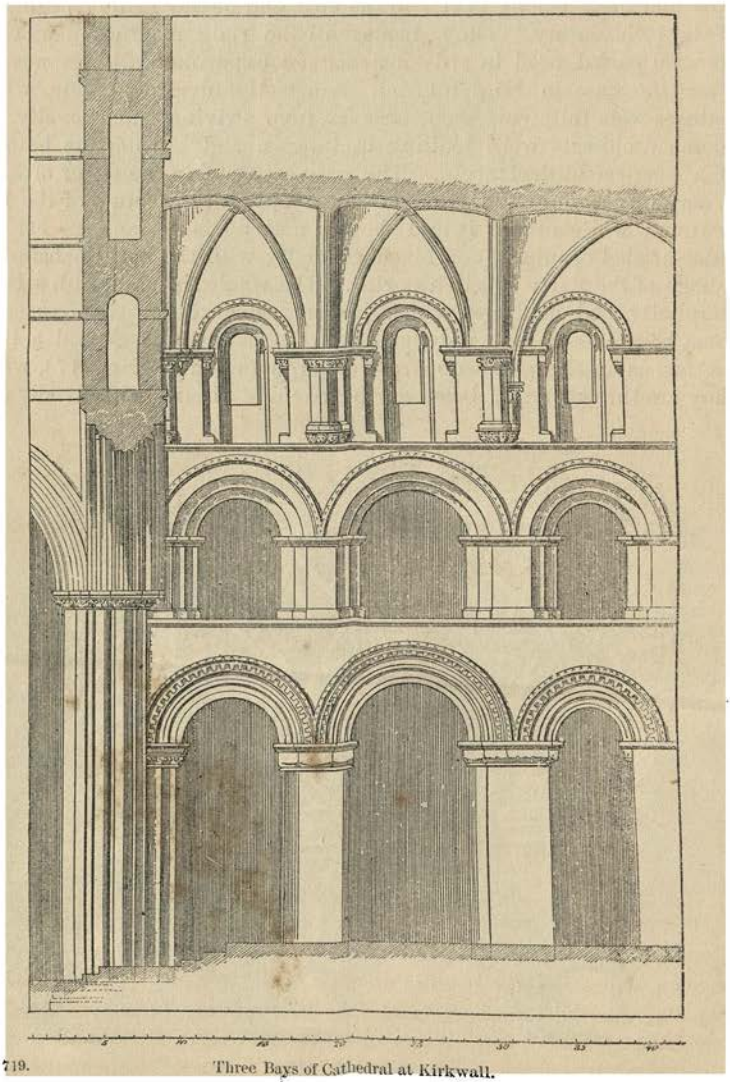
David I. (1124) seems to have been the first king who gave an impulse to the monastic establishments and to the building of larger churches. His endowment of the great border abbeys, and his general patronage of the monks, enabled them to undertake buildings on a greatly extended scale. The churches of Jedburgh and Kelso, as we now find them, belong either to the very end of the 12th or beginning of the 13th century. They display all the rude magnificence of the Norman period, used in this instance not experimentally, as was too often the case in England, but as a well-understood style, whose features were fully perfected. So far from striving after novelty, the Scotch architects were looking backwards, and culling the beauties of a long-established style. The great arch under the tower of Kelso is certainly a well-understood example of the architecture of the 13th century, while around it and above it nothing is to be seen but circular-headed openings, combined generally with the beaded shafts and foliage of the Early English period. The whole is used with a Doric simplicity and boldness which is very remarkable. Sometimes, it must be confessed, this independence of constraint is carried a little too far, as in the pier-arches at Jedburgh (woodcut No. 717), where they are thrown across between the circular pillars without any sub-



718. Arches in Kelso Abbey.

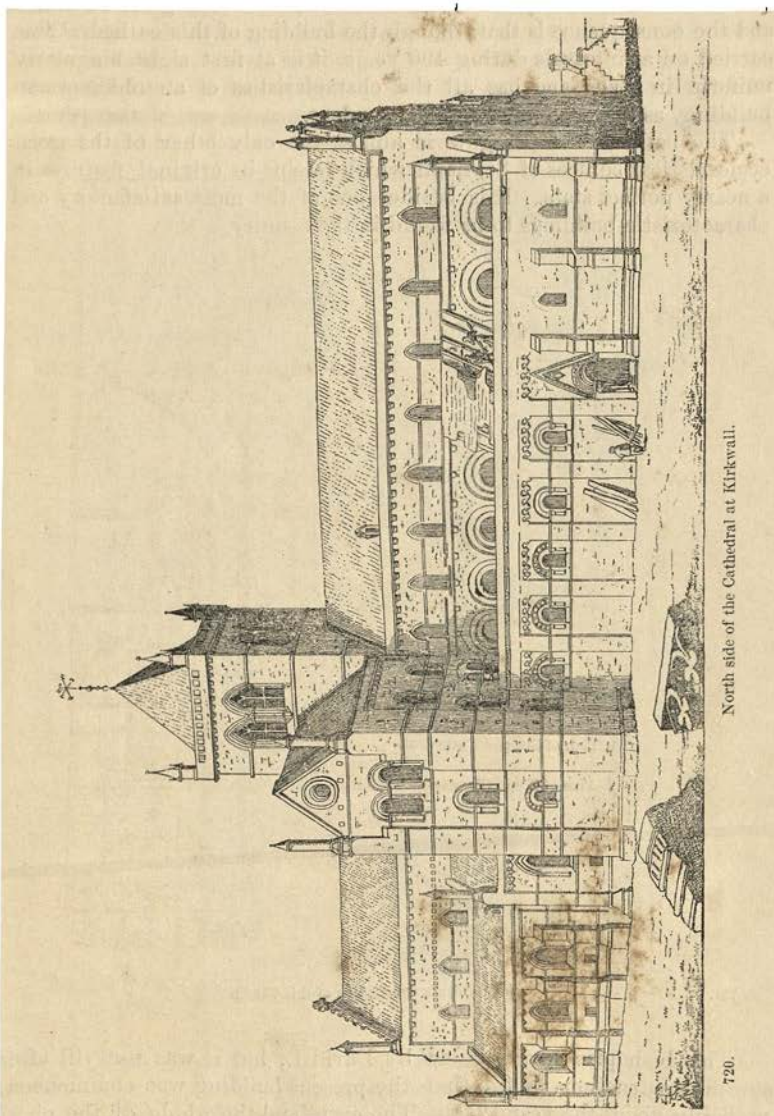
ordinate shaft or apparent support. This was a favourite trick of the later Gothic architects of Germany, though seldom found at this early period. Here the excessive strength of the arch in great measure redeems it.

Besides the general grandeur of these designs, a great deal of the detail of these abbeys is of the richest and best class of the age. The favourite form here, as at Leuchars, is that of circular arches intersecting one another so as to form pointed sub-arches, and these are generally ornamented with all the elaborate intricacy of the period, such as is shown in woodcut No. 718, taken from Kelso Abbey Church.



719. Three Bays of Cathedral at Kirkwall.

While these great abbeys were being erected in the southern extremity of the kingdom, the cathedral of St. Magnus was founded at the other extremity, at Kirkwall in the Orkneys. This building was commenced 1137, and carried on with vigour for some time. The



North side of the Cathedral at Kirkwall.

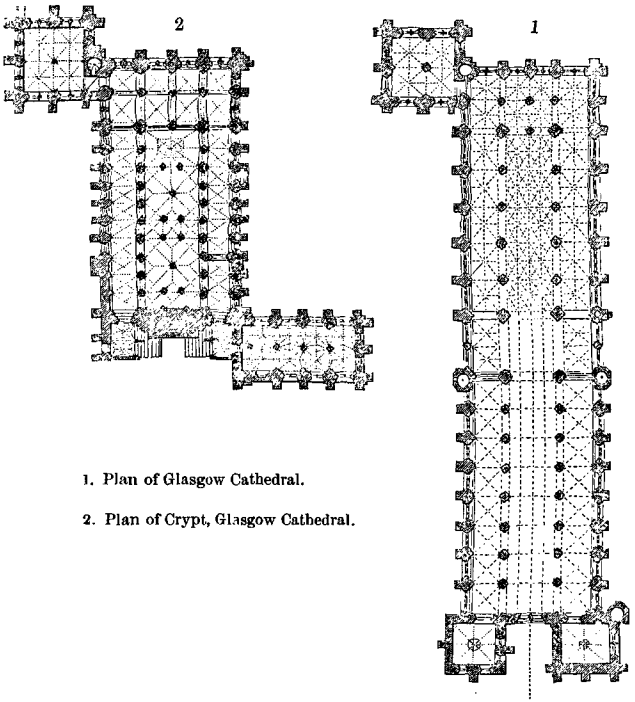
720.

first three arches of the choir (woodcut No. 719) are all that can certainly be identified as belonging to that period. The arch of the tower belongs probably to the 14th century, and the vaulting can hardly be much earlier. The three arches beyond this are still cir-

cular, though with mouldings of a late period. It is said that these were not completed till the 16th century.

Farther south, arches of this late age could not have been built in such an ancient style, but we can believe that in this remote corner the old familiar modes were retained in spite of changing fashions; and the consequence is that, though the building of this cathedral was carried on at intervals during 400 years, it is at first sight singularly uniform in style, and has all the characteristics of an old Norman building, as may be seen from the woodcut.

The cathedral of Glasgow is almost the only other of the great ecclesiastical edifices of Scotland which retains its original features in a nearly perfect state. It is besides one of the most satisfactory and characteristic buildings to be found in the country.



1. Plan of Glasgow Cathedral.

2. Plan of Crypt, Glasgow Cathedral.

721. From J. Collie's description of this Church.

The bishopric was founded by David I., but it was not till after several destructions by fire that the present building was commenced, probably about the year 1240. The crypt and the whole of the choir belong to the latter part of the 13th century, the nave to the 14th, the tower and spire to the 15th. The central aisle never having been intended to be vaulted, the architect has been enabled to dispense with all pinnacles, flying buttresses, and such expedients, and to give

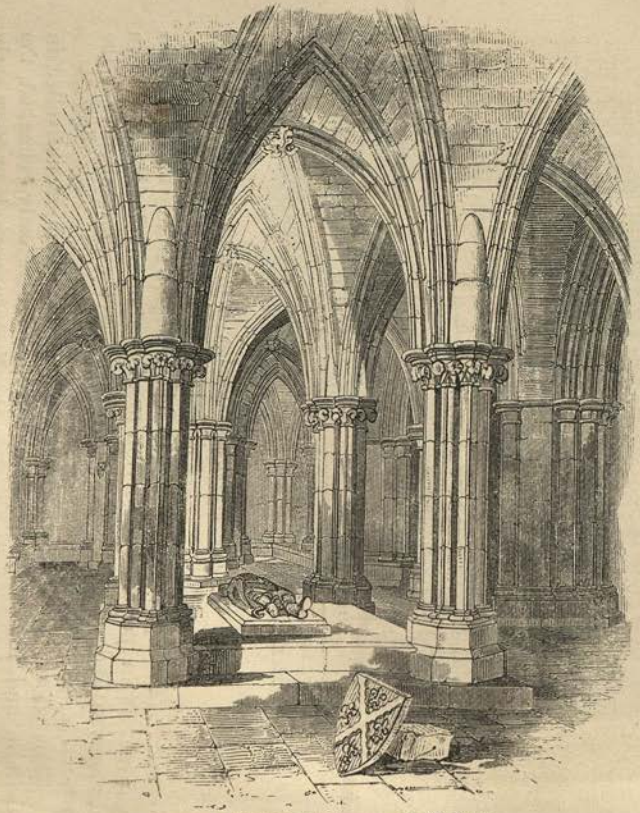
to the whole outline a degree of solidity and repose which is extremely beautiful, and accords perfectly with the simple lancet openings which prevail throughout.

The whole length of the building externally, exclusive of the western towers, one of which has recently been pulled down, is 300 feet, the breadth 73, and the area is about 26,400 feet, so that it is far from being a large building; but its situation is so good, and all the proportions and design of the edifice so appropriate and satisfactory, that it is a more imposing building than many others of twice

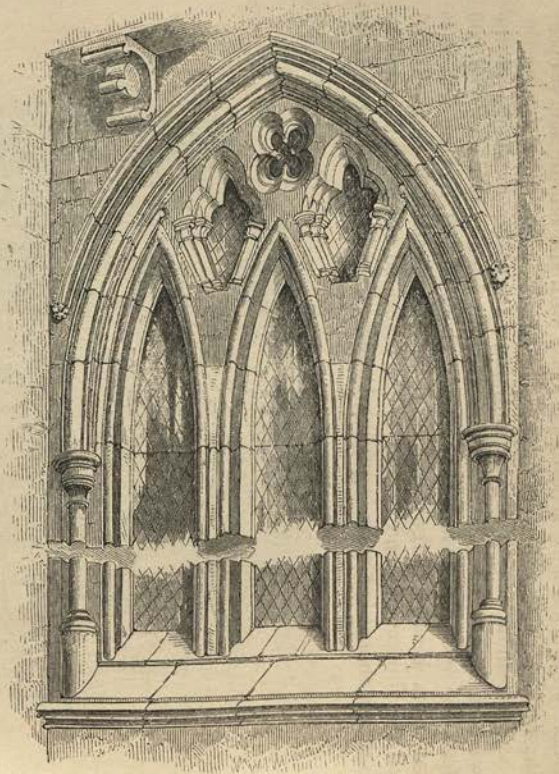
722. View in Crypt of Glasgow Cathedral. R. W. B. del.

its size. The spire, which is 219 feet in height from the floor of the church, is in perfect proportion to the rest of the building, both in dimension and outline, and aids very much the general effect of the whole.

The glory of this cathedral is its crypt, which is unrivalled in Britain, and indeed perhaps in Europe. As already remarked, the English crypts were built during the Norman period, or very early

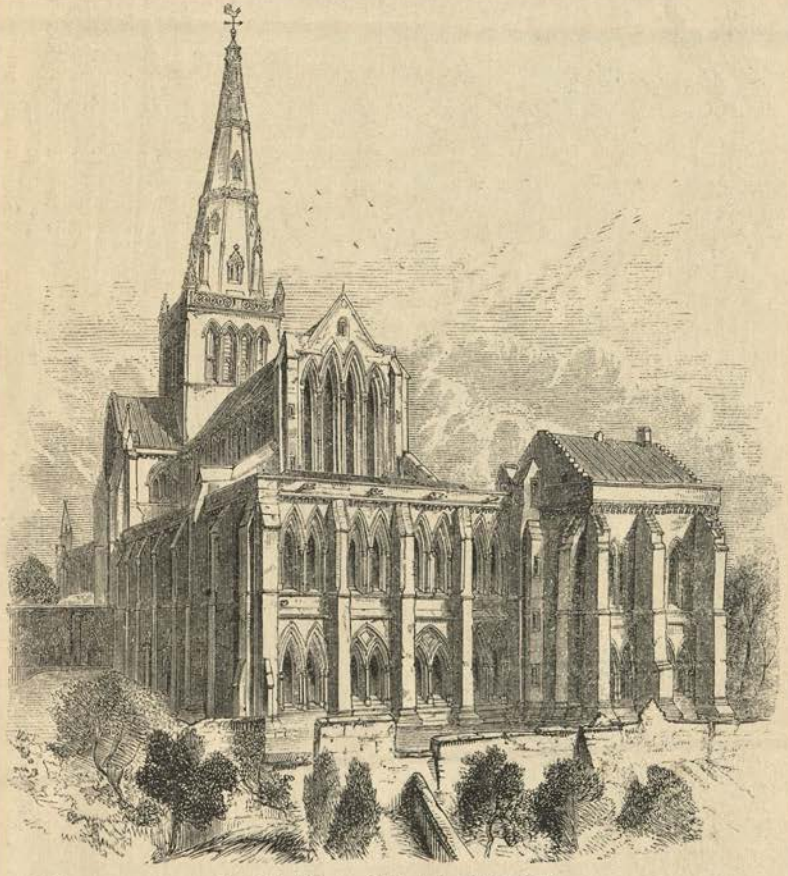


723. Crypt of Cathedral at Glasgow. R. W. B. del.



724. Clerestory Window, Glasgow Cathedral. R. W. B. del.

in the age of the pointed style. That at Glasgow belongs to the perfected style of the 13th century, and as the ground falls rapidly towards the west, the architect was enabled to give it all the height required, and to light it with perfect ease. Here the crypt actually extends under and beyond the whole choir. Had there been an opening in the centre of the vault (and it is by no means clear that one was not originally intended), it would be more like a German

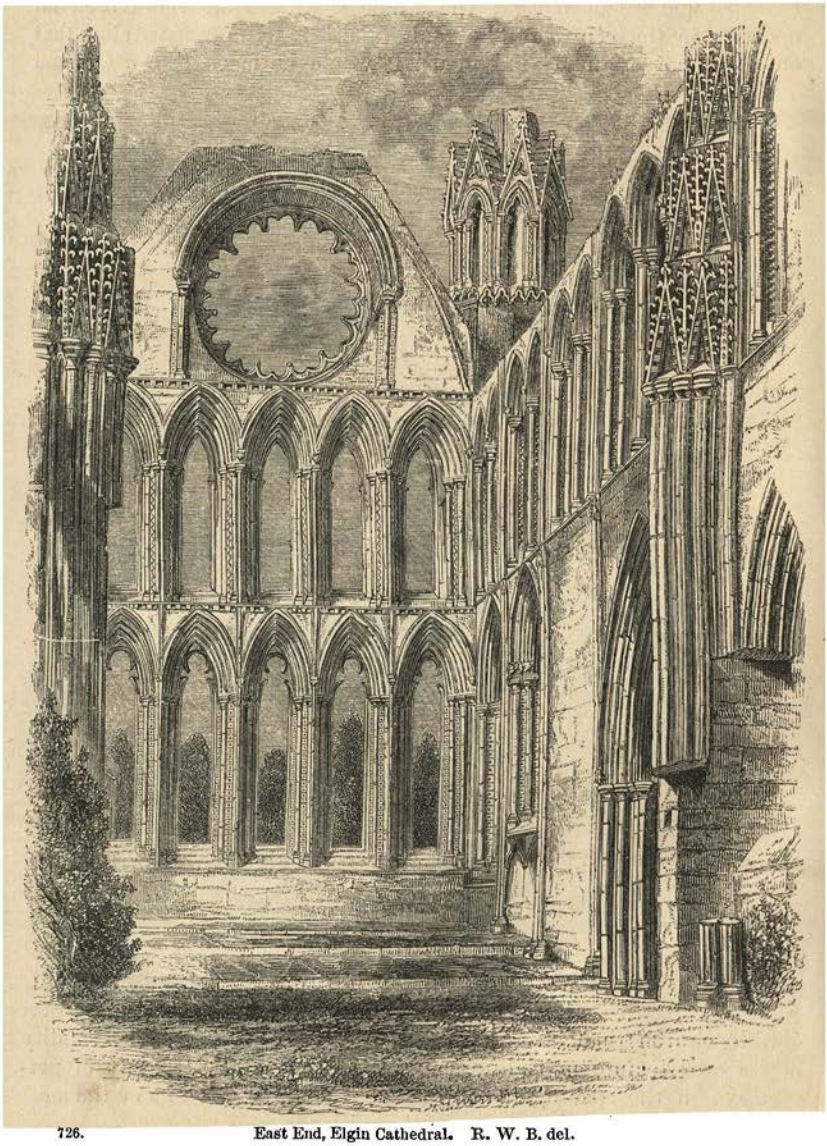


725. East End of Glasgow Cathedral. R. W. B. del.

double church than anything found in England. There is a solidity in its architecture, a richness in its vaulting, and a variety of perspective in the spacing of its pillars, which make it one of the most perfect pieces of architecture in these islands.

In the crypt and lower part the windows are generally single or double lancet, united by an arch. In the clerestory they sometimes take the form of three lancets, united, as shown in woodcut No. 724, by an imperfect class of tracery, more in accordance with the sim-

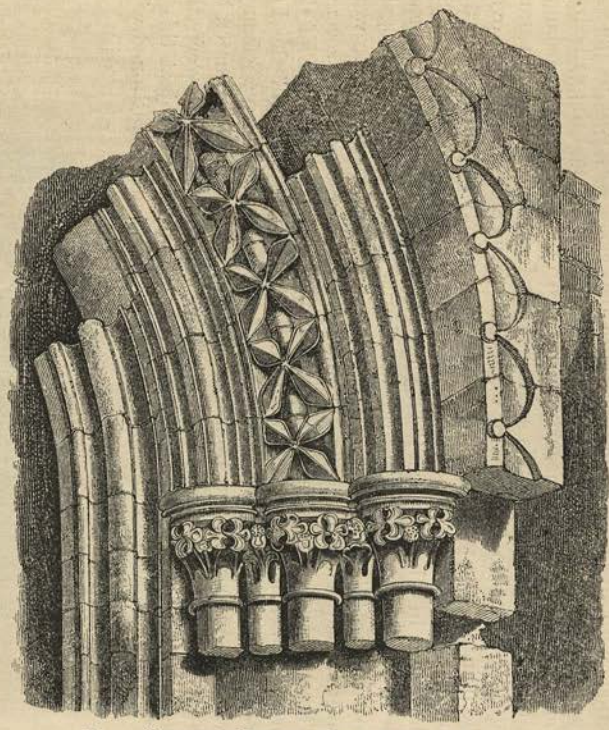
plicity of the building than the more complex form prevalent in England at the same period, though in the south transept and some of the later additions there is tracery of considerable elaboration and beauty of design.



726. East End, Elgin Cathedral. R. W. B. del.

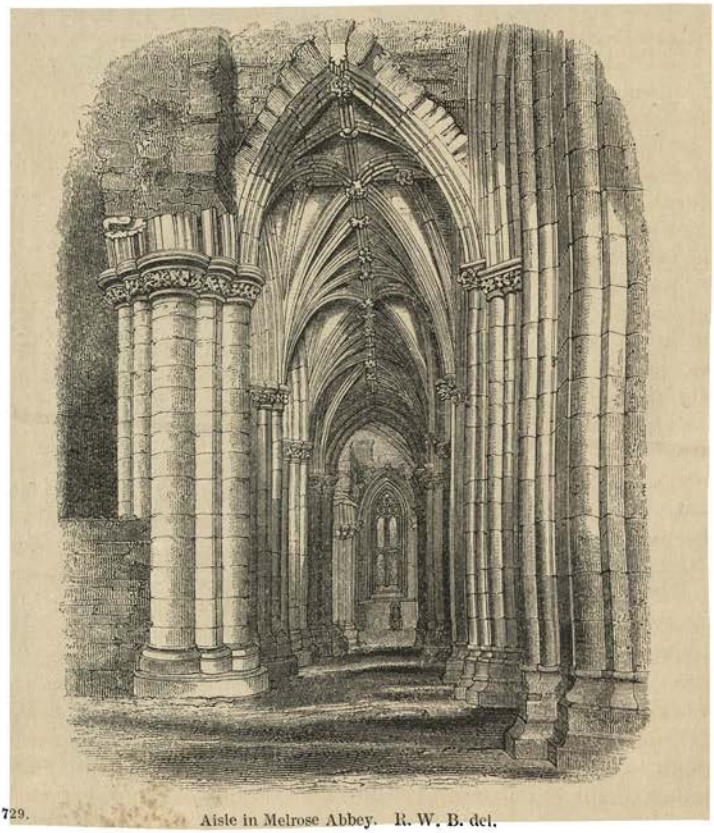
The most beautiful building in Scotland is or was the cathedral of Elgin. Its situation in the province of Moray was so remote that it seems to have been comparatively undisturbed by the English wars,

727. South Transept, Elgin Cathedral. R. W. B. del.



728. Ornament of Doorway, Elgin. R. W. B. del.

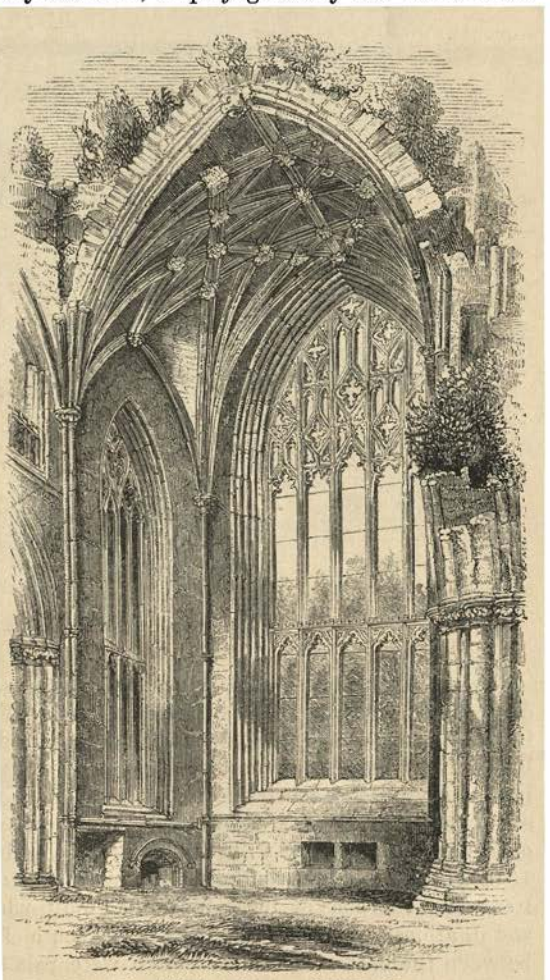
and the greater part of the building was erected during the Edwardian period, with all the beautiful details of that age. The seat of the see was removed from Spynie to Elgin in the year 1223, and the cathedral commenced contemporaneously with those of Amiens and Salisbury. All that now remains of this period is the fragment of the south transept (woodcut No. 727), where we see the round arch reappearing over the pointed, at a period when its use was entirely discontinued in the south. At the same time the details of the doorway (woodcut No. 728) show that in other respects the style was at that period as far advanced as in England. The cathedral was burnt down in 1270, and again partially in 1390. The choir and other parts which still remain were built subsequently to the first conflagration, and escaped the second. These parts appear at first sight to belong to the lancet style of the previous century, but used with the details and tracery of the Edwardian period, and with a degree of beauty hardly surpassed anywhere. As may be seen from the woodcut, the choir is terminated by what is virtually a great east window, but with piers between the compartments instead of mullions. As an architectural object this is a far more stable and appropriate design than a great mullioned win-



729. Aisle in Melrose Abbey. R. W. B. del.

dow like that of York and others in England. But those must be judged of as frames for glass pictures, which this is by no means so well suited to display. Its details, however, are exquisite, and the whole design very rich and beautiful.

The north and south aisles of the nave and the chapter-house were rebuilt after the last destruction, and belong to the 15th century. These parts, though very beautiful, display generally the faults of the Scotch flamboyant style, showing a certain amount of heaviness and clumsiness mixed with the flowing and unconstructive lines of this class of tracery, which nothing can redeem but the grace and elegance with which the French always used it.

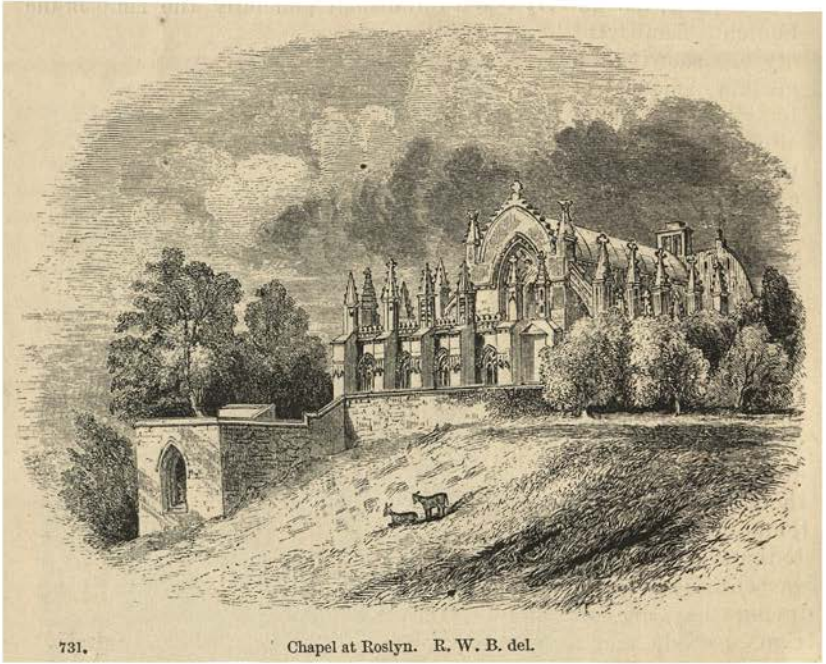


730. East Window, Melrose. R. W. B. del.

Next in beauty to this building is the well-known abbey at Melrose. This, though founded contemporaneously with Jedburgh and Kelso, was entirely rebuilt during the Lancastrian period, and, owing to its situation near the border, shows much more affinity to the English style than the building last described. The nave, as shown by the view of its aisle (woodcut No. 729), is of a bold, solid style of architecture, with a vault of considerable richness. The window of the south transept is the most elegant specimen of flowing tracery to be found in Scotland, and its great east window, as before remarked, is almost the only example of the perpendicular style in the North, and is equal to anything of the kind on this side of the Tweed.

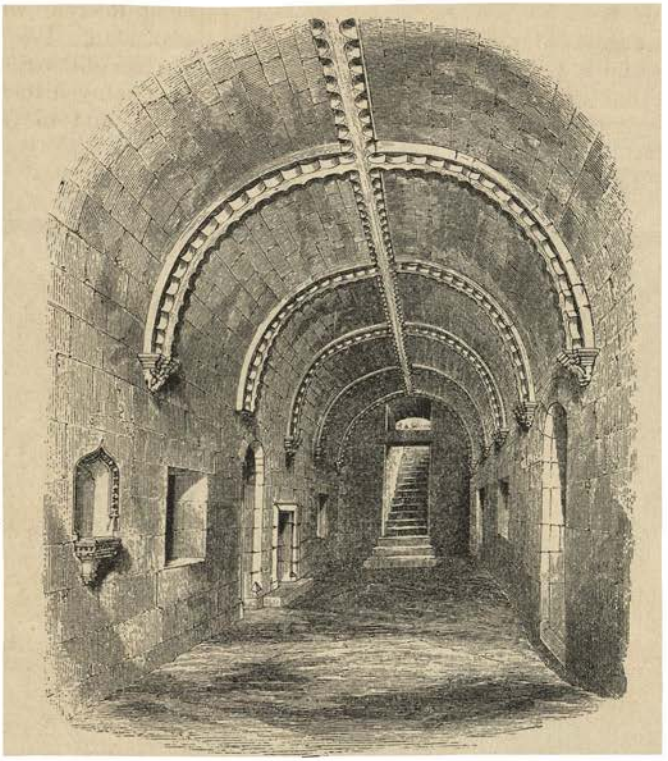
Few of the architectural antiquities of Scotland are so well known,

or have been so much admired, as the chapel at Roslyn, which William St. Clair caused to be erected in the year 1446. For this purpose he did not employ his countrymen, but "brought artificers from other regions and forraigne kingdomes," and employed them to erect a building very unlike anything else to be found in Great Britain.



731. Chapel at Roslyn. R. W. B. del.

From the knowledge we now have of styles, there can be little doubt that his architects came from the north of Spain. In fact, there is no detail or ornament in the whole building which may not be traced back to Burgos or Oviedo; though there is a certain clumsiness both in the carving and construction that betrays the workmanship of persons but little familiar with the task they were employed upon. The chapel is small, only 68 ft. by 35, internally. The central aisle is only 15 ft. wide, and has the southern peculiarity of a tunnel-vault with only transverse ribs such as those found at Fontifroide (woodcut No. 477), and in almost all the old churches of the south of France. At Roslyn, between these, the ornaments, which were painted in the earlier examples, are carved in relief. The vault, as in the south, is a true roof, the covering slabs being laid directly on the extrados or outside of the vault, without the intervention of any wood, a circumstance to which the chapel owes its preservation to the present day. Beyond the upper chapel is a sub-chapel (woodcut No. 732), displaying the same mode of vaulting in a simpler form, but equally foreign and unlike the usual form of vaults in Scotland.

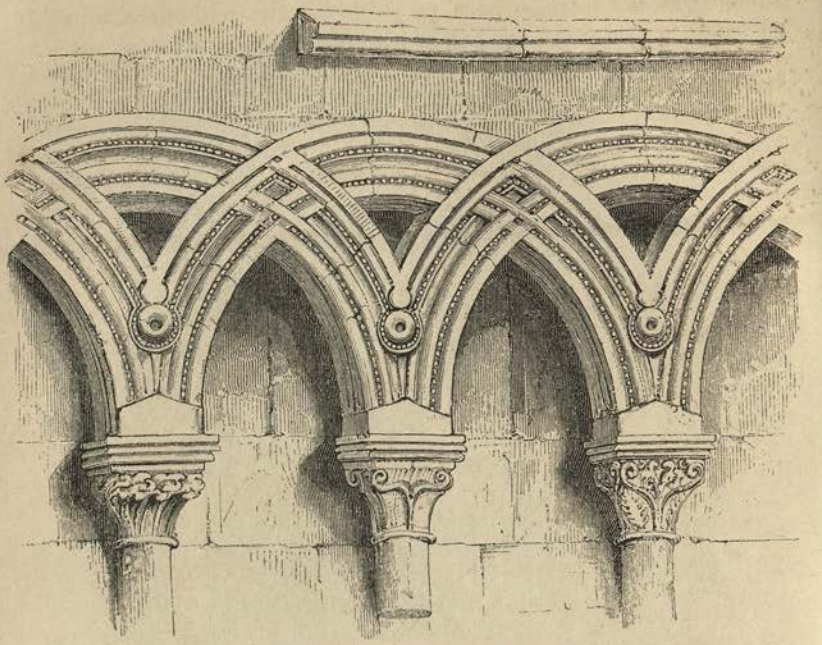


732. Under Chapel, Roslyn. R. W. B. del.

The chapel attached to the palace at Holyrood is of a very different character from this; infinitely more beautiful, though not nearly so curious. The building was originally founded by David I. in 1128, but what now remains belongs to the latter end of the 13th or beginning of the 14th century, having all the elegance of the Edwardian style joined to a massiveness which in England would be indicative of a far earlier period. Some of its details (as that shown, woodcut No. 733) are of a beautiful transitional character, though not so early as might be suspected, and others (like woodcut No. 734) have the rich but foreign aspect that generally characterises the architecture of Scotland.

The nave of the cathedral of Aberdeen is still sufficiently entire to be used as a church, and with its twin western spires of bold castellated design is an impressive building, but has a character of over-heaviness arising from the material used being granite, which did not admit of any of the lighter graces of Gothic art.

The cathedral of St. Andrew's must at one time have been one of the most beautiful in Scotland, but fragments only of its east and west ends now remain. They suffice to show that it was of considerable

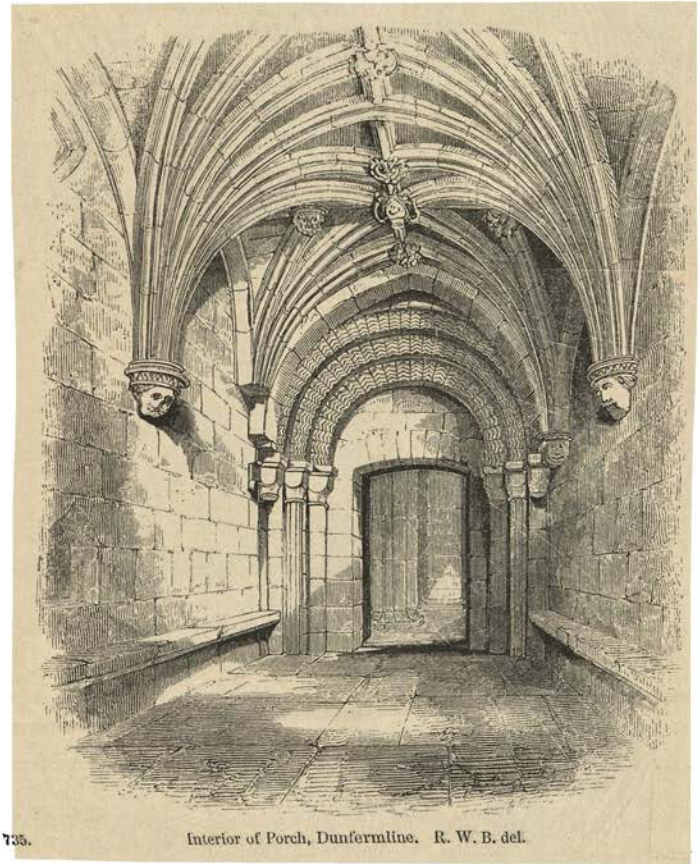


733. Ornament from Holyrood. R. W. B. del.

734. Ornament from Holyrood. R. W. B. del.

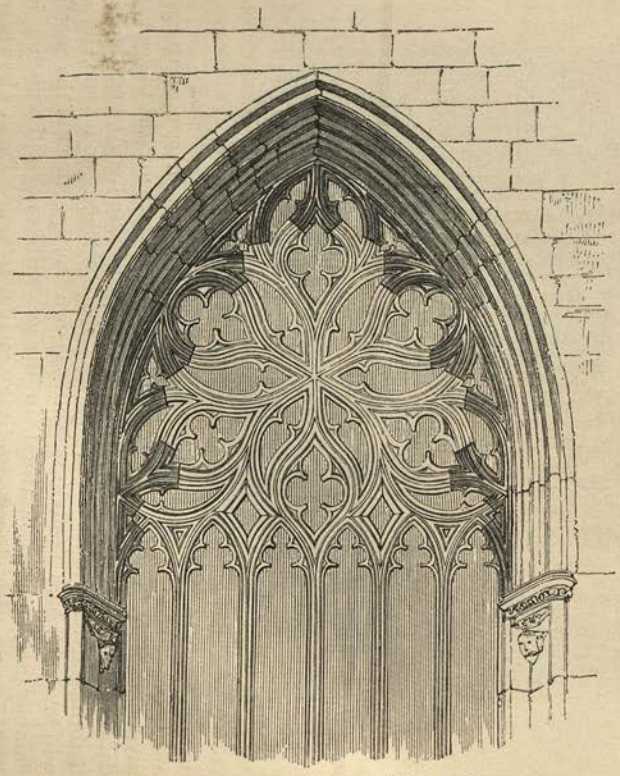
dimensions, and inferior, perhaps, only to Elgin and Melrose in beauty of detail.

Besides these there are in this country many ruined monastic establishments, all having more or less beauty of design or detail. One of the most remarkable of these is Dunfermline, whose nave is of a bold, round-arched style, very like what Durham cathedral would have been had it been intended for a wooden roof, as this was. The other parts display that intermixture of styles so usual in monastic buildings; bold billeted arches, as in woodcut No. 735, being surmounted by



735. Interior of Porch, Dunfermline. R. W. B. del.

vaults of a far later age. But Scotch vaulting was in general so massive and rich that it requires the eye of an archæologist to detect a difference that is never offensive to the true artist. Among the remaining specimens are Dumblane, Aberbrothock, and Dunkeld, a window of which (woodcut No. 736) is a fine specimen of the Scotch flamboyant, and is identical in design with one still existing in Linlithgow parish church, and very similar to many found elsewhere. The west doorway in the last-named church is a pleasing specimen of



736. Window at Dunkeld "restored." R. W. B. del.

737. Doorway, Linlithgow. R. W. B. del.

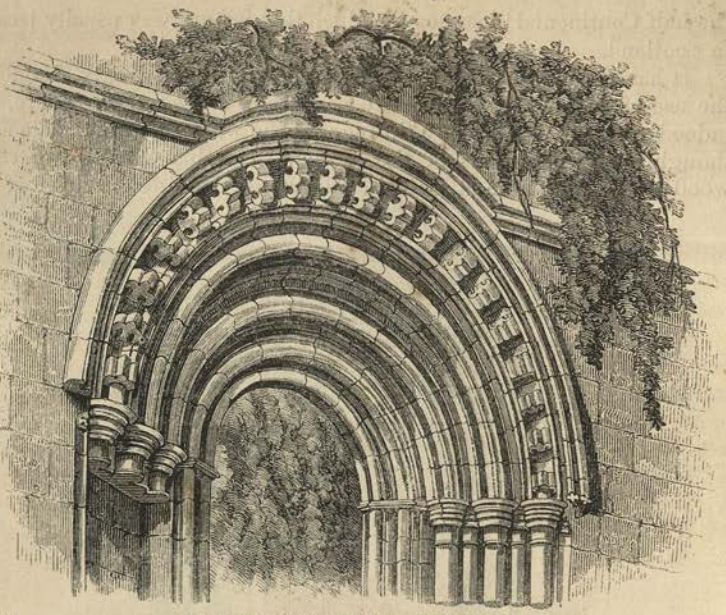
the half Continental[1] manner in which that feature was usually treated in Scotland.

It has already been hinted that the Scotch unwillingly abandoned the use of the circular archway, especially as a decorative feature, and indeed retain it occasionally throughout the whole of the middle ages, though with the details of the period. The doorway illustrated in woodcut No. 738, from St. Giles's, Edinburgh, is a fine specimen of this

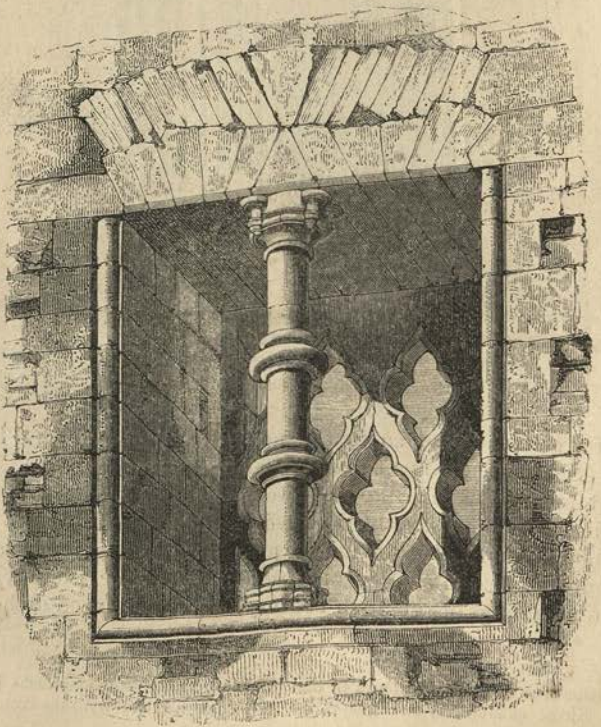
738. Doorway, St. Giles's, Edinburgh. R. W. B. del.

mode of treatment, and so is the next illustration from Pluscardine Abbey. Similar doorways occur at Melrose and elsewhere. For canopies of tombs and such like purposes the circular arch may almost be said to be as common as the pointed. Other examples are found at Iona, though there the buildings are almost as exceptional and as Continental in design as Roslyn itself, the circular pier-arch is used with the mouldings of the 13th century, and the pointed arch is placed

[1] The same class of tracery is found in the Lamberti Kirche at Munster, and generally in Westphalia; some specimens being almost absolutely identical with the Scotch examples.



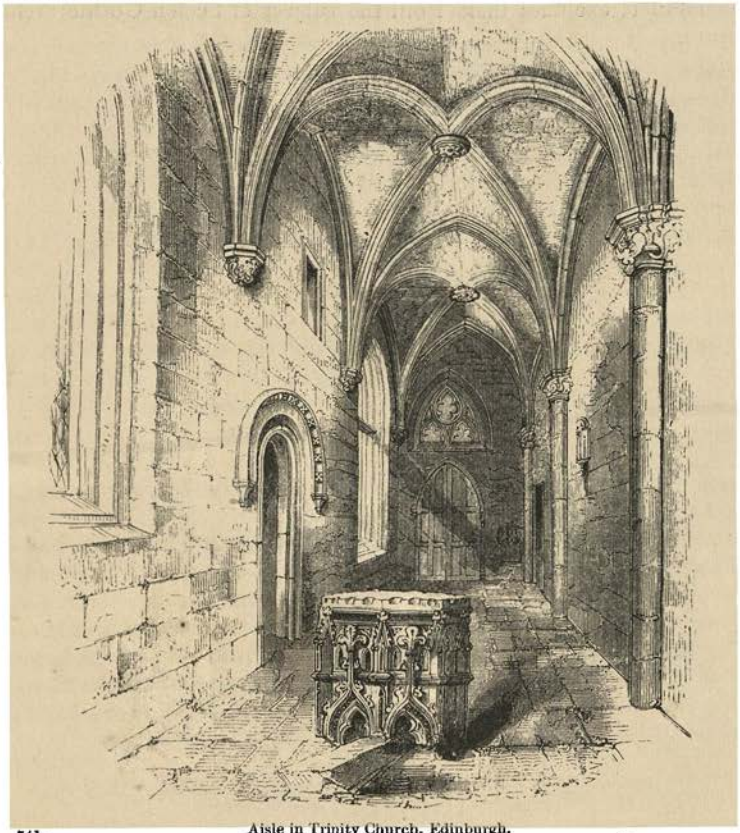
739. Doorway, Pluscardine Abbey. R. W. B. del.



740. Window in Tower, Iona. R. W. B. del.

on a capital of intertwined dragons, more worthy of a Runic cross or tomb-stone than a Gothic edifice. The tower windows are filled with quatrefoil tracery, in a manner very unusual, and a mode of construction is adopted such as does not perhaps exist anywhere else in Britain. The whole group, in fact, is as exceptional as its situation, and as remote from the usual modes of architecture on the mainland.

As already mentioned, the early Scotch vaults were singularly bold and massive, and all their mouldings were characterised by strength and vigour, as shown in the examples taken from Glasgow and Dunfermline (woodcuts Nos. 723 and 735). At a later period, however, when the English were using perpendicular tracery, and when the invention of fan-vaulting was beginning to be introduced, the Scotch, with the flamboyant tracery of the French, adopted also their weak and unconstructive modes of vaulting. It is common to find so poor a vault as that of Trinity College Church, Edinburgh, erected contemporaneously with the elaborate vaulting of the royal chapels in England; and not only in this but in every other respect it is to the Continent that we must look for analogies with the architecture of the Scotch, and not to their nearest neighbours.



741. Aisle in Trinity Church, Edinburgh.

Scotland is, generally speaking, very deficient in objects of civil or domestic architecture belonging to the middle ages. Of her palaces, Holyrood has been almost rebuilt in the reign of Charles I., and Edinburgh castle entirely remodelled. Stirling still retains some fragments of ancient art, and Falkland seems on the verge of the Renaissance. Linlithgow perhaps alone remains in its original state, and is a fine specimen of a fortified palace, with bold flanking towers externally and a noble court-yard in the centre.

There are, besides these, numberless square towers and fortalices scattered over the country, which were the residences of the turbulent barons of Scotland during the middle ages, but none of these can properly be called objects of architecture.

The baronial edifices of the succeeding age give the impression of belonging to an earlier style, retained in this wild country long after it had been laid aside elsewhere. They are as remarkable as any class of buildings erected after the middle ages, both for originality and picturesqueness. But they were, with scarcely an exception, built after the accession of Elizabeth to the throne of England; consequently their age, together with certain features belonging to the style of the Renaissance, excludes them from the subject of Scotch Gothic architecture.

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CHAPTER IV.

IRELAND.

CONTENTS.

Oratories — Round Towers — Domical Dwellings — Domestic Architecture — Decorations.

AT no period of their history were the people of Ireland either so settled or so prosperous as to be enabled to undertake the erection of any great ecclesiastical buildings such as are found everywhere in Great Britain, from Kirkwall to Cornwall.

The cathedral of Dublin must always have been a second class edifice for a metropolitan church, and those of Cashel and Kildare, which are as celebrated and as important as any in Ireland, are neither so large nor so richly ornamented as many English parish churches. The cathedral of Lismore has entirely disappeared; and generally it may be asserted that throughout the country there is not one church remarkable for its architectural beauty or magnificence, though many are interesting from their associations, and picturesque from the state of ivy-clad ruin in which they appear.

The same is true with regard to the monasteries—they are few, and generally small, though rich in detail. One of the most elaborate is that of the Holy Cross near Cashel, erected in the 15th century. This, like every other building of the Gothic period in Ireland, shows a strong affinity to the styles of the Continent, and a clearly marked difference from those of this country.

Some of the monasteries still retain their cloisters, which in all instances have so foreign an aspect as to be quite startling. That at Muckross (Killarney) retains the round arch on two sides with the details of the 15th century. That at Kilconnel (woodcut No. 742)[1] looks more like a cloister in Sicily or Spain than anything in these islands. None of them seem large. The last-named is only 48 ft. square, though if it were more extensive it would be out of place compared with the rest of the establishment.

Altogether the Gothic antiquities of Ireland do not deserve much notice in a work not specially devoted to that one subject; but besides these Ireland possesses what may properly be called a Celtic style of architecture, which is as interesting in itself as any of the minor local styles of any part of the world, and so far as at present known, is quite

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[1] The woodcuts in this chapter are, with one exception, borrowed from Wilkinson's 'Ancient Architecture and Geology of Ireland.'

74. Cloister, Kilconnel Abbey.

peculiar to the island. None of the buildings of this style are large, though the ornaments on many of them are of great beauty and elegance. Their chief interest lies in their singularly local character, and in their age, which probably extends from the 5th or 6th century to the time of the English conquest in 1176. They consist principally of churches and round towers, together with a number of other antiquities hardly coming within the scope of this work.

No Irish church of this period now remaining is perhaps even 60 ft. in length, and generally they are very much smaller, the most common dimensions being from 20 to 40 ft. Increase of magnificence was sought to be attained more by extending the number than by augmenting the size. The favourite number for a complete ecclesiastical establishment was 7, as in Greece, this number being identical with that of the 7 Apocalyptic churches of Asia. Thus, there are 7 at Glendalough, 7 at Cashel, and the same sacred number is found in several other places,[1] and generally two or three at least are found grouped together.

No church is known to have existed in Ireland before the Norman conquest that can be called a basilica, none of them being divided into aisles either by stone or wooden pillars, or possessing an apse, and no circular church has yet been found: nothing, in short, that would lead us to believe that Ireland obtained her architecture direct from Rome, while everything, on the contrary, tends to confirm the belief of an intimate connexion with the farther East, and that her earlier Christianity and religious forms were derived from Greece by some of the more southerly commercial routes which at that period seem to have abutted on Ireland.

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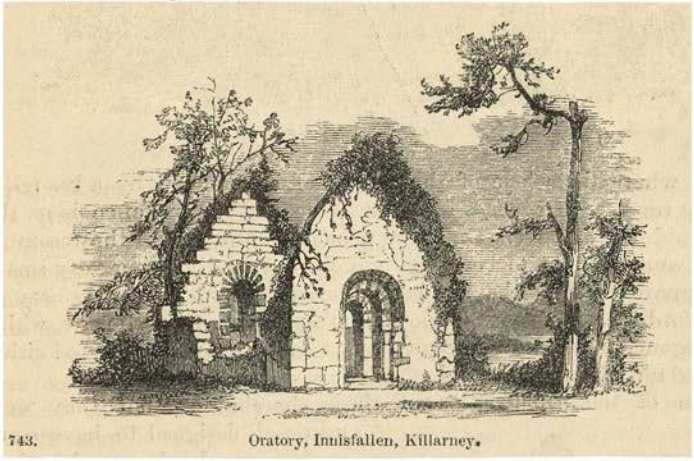
[1] Seven churches are also found at Scattery and Innis Caltra in Clare, Tory Island Donegal, Rattoo in Kerry, Inchclorin, Longford, and Arranmore in Galway.

Both in Greece and in Ireland the smallness of the churches is remarkable. They never were in fact basilicas for the assembly of large congregations of worshippers, but oratories, where the priest could celebrate the divine mysteries for the benefit of the laity. It is not only at Mount Athos and other places in Europe, but also in Asia Minor, that we find the method of grouping a large number of small churches together, seven being always the favourite number, and one very often attained.[1]

The Irish Celtic churches are generally rectangular apartments, a little longer than they are broad, like the small one on the island of Innisfallen on the lake of Killarney (woodcut No. 743). To the larger churches a smaller apartment of the same proportions is added to the eastward, forming a chancel, with an ornamental arch between them.

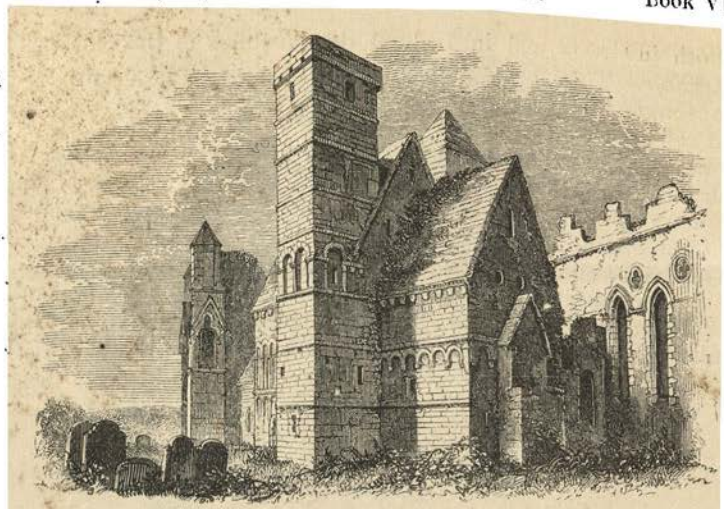


743. Oratory, Innisfallen, Killarney.

The most remarkable of these now existing is that known as Cormac's Chapel, in the rock at Cashel (woodcut No. 744), which was consecrated in the year 1134. It is a small building, 55 ft. long over all externally. The chancel is an apartment 12 ft. square internally, covered with an intersecting vault; the nave is 18 ft. by 29, and covered by a tunnel-vault with transverse ribs, very like those found in the south of France. Externally, as shown in the view, it has two square towers attached to it at the juncture between the nave and chancel, and is richly ornamented by a panelling of small arches.

In almost all cases the principal entrance to these churches is from the west, opposite to the altar. This chapel at Cashel is, however, an exception, having a north and a south entrance. That on the north is the principal, and very richly ornamented. The same is true at Ard-

[1] A good deal of uncertainty and even of ridicule has been thrown on the subject of the Eastern origin of the Irish church by the extreme enthusiasm of its advocates, but there seems to be no reasonable ground for doubting the fact. At all events it may safely be asserted that the Christian religion did not reach Ireland across Great Britain, or by any of the ordinary channels from the Continent.



744. Cormac's Chapel, Cashel.

more, where the whole of the west end is taken up by a bas-relief rudely representing scenes from the Bible, and the entrance is on the north side of the nave. On these principal entrances all the resources of art were brought to bear, the windows generally being very small, and apparently never having been glazed. There is one gateway at Freshford in Kilkenny, and another at Aghadoe near Killarney, which for elegance of detail will bear comparison with anything found either in England or on the Continent, of the same age.

One of the peculiarities of these churches is, that they were nearly all designed to have stone roofs, no wood being used in their construction.

745. Section of Chapel, Killaloe.

The annexed section (woodcut No. 745) of the old church at Killaloe, belonging probably to the 10th century, will explain how this was generally managed. The nave was roofed with a tunnel-vault with a pointed one over it, on which the roofing slabs were laid. Sometimes, instead of a continuous vault, the upper vault was cut into ribs, and the roof built up straight externally, with horizontal courses resting on them. This mode of double roofing was perhaps a complication and no improvement on that adopted in the south of France in the same age (woodcut No. 472), but it enabled the Irish to make the roof steeper than could be effected

with a single vault, and in so rainy a climate this may have been of the first importance.

The roof of Cormac's Chapel, Cashel (woodcut No. 744), is of this double construction; so is the building called "St. Kevin's Kitchen" at Glendalough (woodcut No. 746), which may belong to the 7th century. There is another very similar at Kells, and several others in various parts of Ireland, all displaying the same peculiarity.

746. St. Kevin's Kitchen, Glendalough.

Had the Irish been allowed to persevere in the elaboration of their own style, they probably would have applied this expedient to the roofing of larger buildings than they ever attempted, and might, in so doing, have avoided the greatest fault of Gothic architecture. Without more experience than we have to guide us, it is difficult to pronounce to what extent this expedient might have been carried with safety, or to say whether the Irish double vault is a better constructive form than the single Romance pointed arch; but it was so certainly an improvement on the wooden roof, that its early abandonment is much to be regretted.

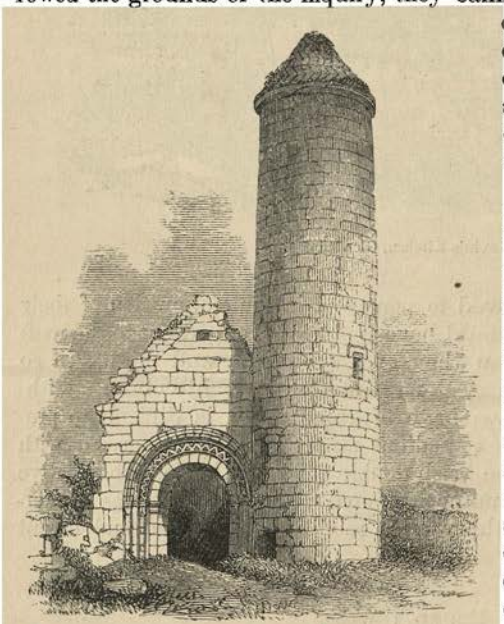
ROUND TOWERS.

The round towers which accompany these ancient churches have long proved a stumbling-block to antiquaries, not only in Ireland but in this country, and more has been written about them, and more theories proposed to account for their peculiarities, than have been devoted to any other objects of their class in Europe.

The controversy has been, to a considerable extent, set at rest by the publications of Mr. George Petrie.[1] He has proved beyond all cavil that the greater number of the towers now existing were built by Christians, and for Christian purposes, between the 5th and 13th centuries, and has shown that there is no reasonable ground for supposing that the remainder are either of a different age or erected for different purposes.

It is true his argument only removes the difficulty one step farther back, as he does not attempt to show whence the Irish obtained this very remarkable form of tower, or why they persevered so long in its use, with peculiarities not found either in the contemporary churches or in any other of their buildings. No one supposes that this kind of tower was invented by the rude builders of the early churches, and no theory yet proposed accounts for the perseverance of the Irish in its employment while the practice of all the other nations of Europe was so widely different. It must have been a sacred and time-honoured form somewhere, and with some people, previous to its current adoption in Ireland, but the place and the time at which it was so still remain to be determined.

Although, therefore, Mr. Petrie's writings have considerably narrowed the grounds of the inquiry, they cannot be said to have set the question at rest, and any one who has seen the towers must feel that there is still room for any amount of speculation regarding such peculiar monuments.



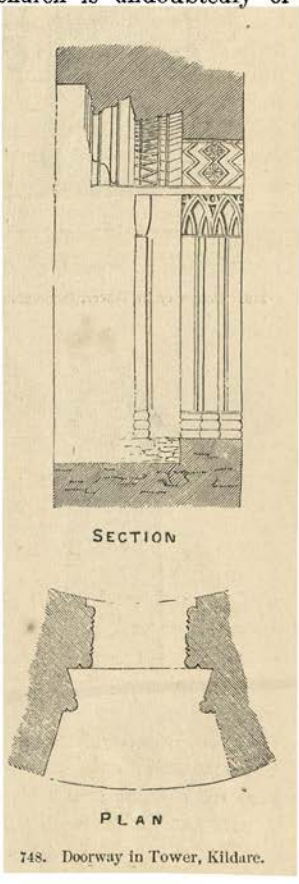
747. Round Tower and Chapel, Roscrea.

In nine cases out of ten they are placed unsymmetrically at some little distance from the churches to which they belong, and generally are of a different age and different style of masonry. Their openings have in all cases, from the oldest to the most modern, sloping jambs, which are very rare in the churches, and only found in the earliest examples. Their doorways are always at a certain height from the ground, 7, 10, or 13 ft., while the church doors are, it need hardly be said, always on the ground level. But more than

[1] The Ecclesiastical Architecture of Ireland anterior to the Anglo-Norman Invasion. Dublin, 1845.

all this, there is an unfamiliar aspect about every detail of them which is never observed in the churches. These latter may be rude or may be highly finished, but they never have the strange and foreign appearance which the towers always present.

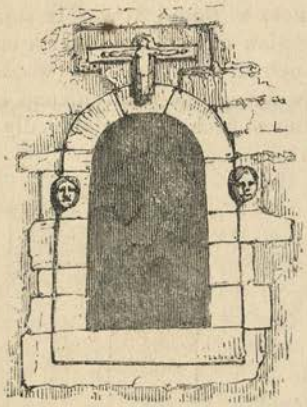
Notwithstanding all this the proof of their origin is in most cases easy. In woodcut No. 746, for instance, a round tower is shown placed *upon* what is, undoubtedly, a Christian chapel, and which must consequently be either coeval or more ancient. At Roscrea (woodcut No. 747) the tower is bonded with the walls of the church, and evidently coeval, and the doorway of the church is undoubtedly of Christian round Gothic of the 10th or 11th century. At Kildare the doorway of the tower (woodcut No. 748) is likewise of unquestionable Christian art, though somewhat earlier, probably of the 8th or 9th century, and is most certainly an integral part of the design; and at Timahoe the doorway of the tower is richer and more elaborate, but at the same time of a style so nearly resembling that of Cormac's Chapel (woodcut No. 744) as to leave no doubt of their being nearly of the same age. The only remarkable difference is that the jambs of the doorway of the tower slope considerably inwards, while all those of the chapel are perfectly perpendicular. Another proof of their age is, that many of the doorways have Christian emblems carved *in relief* on their lintels, as in the example from the tower at Donoughmore (woodcut No. 749), or in that from Antrim (woodcut No. 750), or on the round tower at Brechin in Scotland, all which emblems are so situated that they could not have been added, and must therefore be considered as original. When we find that the other towers which have not these indications differ in no other respect from those that have, it is impossible to resist the proof of their Christian origin; the positive evidence of a few being sufficient to overbalance the mere absence of proof in a far greater number.



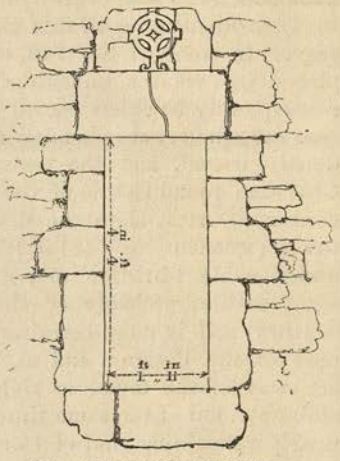
748. Doorway in Tower, Kildare.

Antiquaries have enumerated about 118 of these monuments as still to be found in Ireland; of these about 20 are perfect, or nearly so, and vary in height from about 60 ft. to 130 ft., which is the height of the imperfect one at Old Kilcullen. They all taper upwards towards the summit, and generally are crowned with a conical cap like that at Roscrea (woodcut No. 747), though not generally constructed in the herring-bone masonry there shown.

The tower at Devenish (woodcut No. 751) may be taken as a typical example of the class. It is 82 ft. high, with a conical cap, and its doorway and windows are all of the form and in the position most

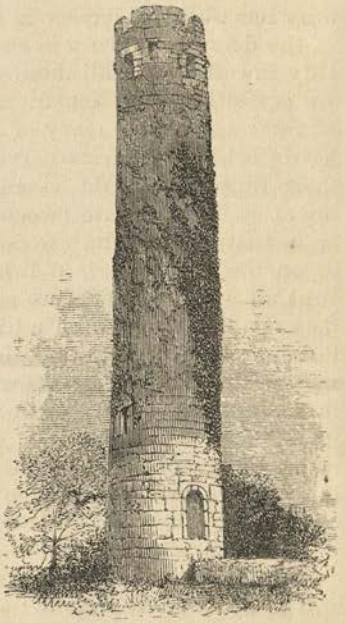


749. Doorway in Tower, Donoughmore, Meath.



750. Doorway in Tower, Antrim.

751. Tower, Devenish.



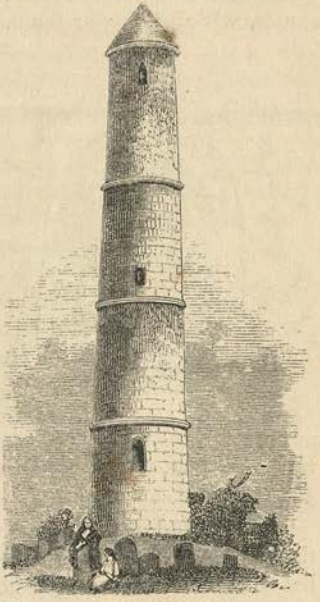
752. Tower, Kilree, Kilkenny.

usually found in monuments of this class. Frequently the conical cap is omitted and a battlemented crown supplies its place; this is the case at Kildare, and also at Kilree (woodcut No. 752). In one

instance, and, I believe, one only, the base of the tower is octagonal (woodcut No. 753). This is found at Keneith, county Cork.[1]

One of the most beautiful and most perfect is that of Ardmore (woodcut No. 754). It is of beautiful ashlar masonry throughout, and

753. Tower, Keneith, Cork.



754. Tower, Ardmore.

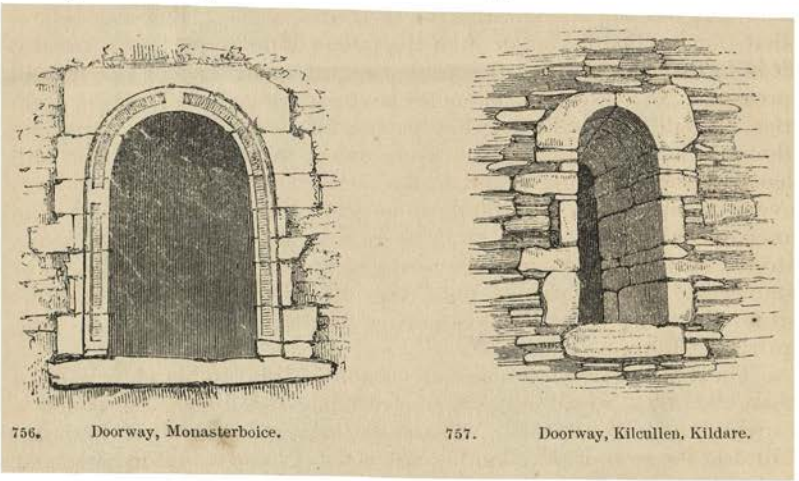
is divided externally into 4 stories by string-courses, which do not, however, mark the position of the floors inside. All its mouldings and details lead to the presumption that it is nearly coeval with Cormac's Chapel, Cashel, and that consequently it must belong to the 12th century. It stands within the precincts of the rude old church mentioned above, and when explored not long ago the skeletons of two persons were found below its foundations, laid in such a manner as to lead to the inevitable conclusion that it was a place of Christian burial before the foundations of the tower were laid.

755. Floor in Tower, Keneith.

Generally the floors that divide the tower into stories are of wood, but sometimes they are of masonry, constructed as that shown (woodcut No. 753) from Keneith tower. They are always approached by ladders leading from one story to the next.

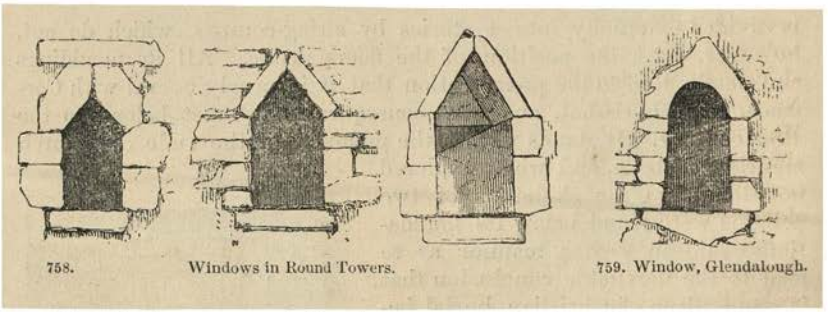
[1] Compare this with the contemporary tower at Gazni, woodcut No. 334.

Several instances of doorways have been quoted above. Of these no two are exactly alike, though all show the same general characteristics. That at Monasterboice, for instance (woodcut No. 756), has an arch cut out of a horizontal lintel extending the whole way across, while that at Kilcullen (woodcut No. 757) has the arch cut out of two stones, which is by far the most usual arrangement.



756. Doorway, Monasterboice. 757. Doorway, Kilcullen, Kildare.

Their windows are generally headed with two stones meeting at the apex, as in the three examples here given (woodcut No. 758), but sometimes the window-head is either a flat lintel or a single stone cut into the form of an arch, as in this instance from Glendalough.



758. Windows in Round Towers. 759. Window, Glendalough.

Though these remarkable towers are of extremely various forms, differing according to their age and locality, almost all exhibit that peculiar Cyclopean character of masonry which has led to such strange, though often plausible, speculations; for not only their details but their masonry is such that if found at Norba in Latium or at Æniadæ in Acarnania it would excite no remark, but here it stands alone and exceptional to everything else.

Whatever may have been their origin, there can be no doubt as to the uses to which they were applied by the Christians—they were symbols of power and marks of dignity. They were also bell-towers.

But perhaps their most important use was that of keeps or fortalices; places to which, in troubled times, the plate of the church and everything of value could be removed and kept in safety till danger was past.

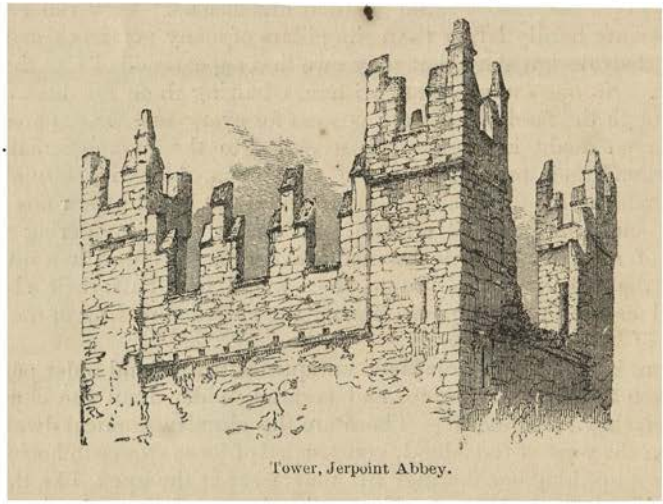
As architectural objects these towers are singularly pleasing. Their outline is always graceful, and the simplicity of their form is such as gives the utmost value to their dimensions. Few can believe that they are hardly larger than the pillars of many porticoes, and that it is to their design alone that they owe that appearance of size they all present. No one can see them without admiring them for these qualities, though the fascination they possess for every one that approaches them is no doubt in great measure owing to the mystery that still hangs round their origin and to the association of locality. In almost every instance the tower stands alone and erect beside the ruins of an ancient but now deserted church, and among the mouldering tombstones of a neglected or desecrated graveyard. If found in a town or among the busy haunts of men, they would lose half their charm; situated as they are, they are among the most interesting of the antiquities of Europe.

There is still another class of antiquities in Ireland older perhaps than even these round towers, and certainly older than the churches to which they are attached. These are the circular domical dwellings found in the west of the island, constructed of loose stones in horizontal layers approaching one another till they meet at the apex, like the old so-called treasuries of the Greeks, or the domes of the Jains in India. Numbers of these are still to be found in remote parts, and sometimes they are accompanied by what are properly called oratories, like that shown in woodcut No. 760, taken from Mr. Petrie's valuable work. It is certainly one of the oldest places of worship in these islands, belonging probably to the age of St. Patrick; and it is also one of the smallest, being only 23 ft. by 10 externally. It shows the strange Cyclopean masonry, the sloping doorway, the stone roof, and many of the elements of the subsequent style, and it is at the same time so like some things in Lycia and in India, and so unlike almost any other building in Europe, that it is not to be wondered at that antiquaries should in-

760. Oratory of Gallerus. From Petrie's Ancient Architecture of Ireland.

dulge in somewhat speculative fancies in endeavouring to account for such remarkable phenomena.

Ireland is not rich in specimens of domestic architecture of the middle ages, but such fragments as do exist show marked differences from the contemporary style in England. Such battlements for instance as those which crown the tower of Jerpoint Abbey are iden-



Tower, Jerpoint Abbey.

tical with many found in the north of Italy, but very unlike anything either in England or Scotland. They give a foreign look to the whole building which is very striking.

The same may be said of the next example (woodcut No. 762) from a house in Galway. Its architecture might be Spanish, but its ornamental details look like a reminiscence of the entwined decoration of

House, Galway.

a Runic cross. From whatever source they are derived, it certainly was not England.

Ballyromney Court, illustrated in woodcut No. 763, is perhaps the most usual form of an Irish mansion in the last age of Gothic. After its time the Elizabethan became the prevalent style. All individuality

763. Ballyromney Court, Cork.

vanished with the more complete subjection of the country in the reign of that queen. This is, no doubt, to be regretted; but as before remarked, it is not for her Gothic so much as for her Celtic antiquities that Ireland is interesting, the epoch of which closed as nearly as possible with the English conquest in 1176.

764. Cross at Kells.

BOOK IX.

CHAPTER I.

SCANDINAVIA.

CONTENTS.

Churches at Wisby — Bornholm — Denmark — Norway — Cathedral at Trondhjem — Wooden Churches.

The three kingdoms of Denmark, Sweden, and Norway, including Finland, form in themselves an architectural province; not perhaps characterised by any very striking difference from the countries on the southern shores of the Baltic, but still so distinct as to make it convenient to treat them separately.

The buildings within the boundaries indicated are not so interesting to the architect as they are to the archæologist; none of them are worthy to be compared with the great English or French cathedrals either for size or for beauty of design, though many are old, and retain their peculiarities to an extent not often found elsewhere.

The most remarkable group of churches in Scandinavia is, beyond all doubt, that found at Wisby in the island of Gothland. During the 11th and 12th centuries a great portion of the Eastern trade which had previously been carried on through Egypt or Constantinople was diverted to a northern line of communication, owing principally to the disturbed state of the East, which preceded and in fact gave rise to the Crusades. At this time a very considerable trade passed through Russia, and centered in Novogorod. From that place it passed down the Baltic to Gothland, which was chosen apparently for the security of its island position, and its capital, Wisby, became the great emporium of the West. After two centuries of prosperity, it was gradually superseded by the rise of the Hanseatic towns on the mainland, and a final blow was struck by Valdemar of Denmark, who took the town by storm in 1361. Since then it has gradually become depopulated. The consequence has been that, no additional accommodation being required, the old churches have remained unaltered, nor have they been pulled down and their materials used for secular purposes.

Even now Wisby is said to retain eighteen churches belonging to the period of its prosperity, the whole island containing twice or three times that number.

The cathedral was originally founded about the year 1100, burnt down in 1175, and rebuilt as we now find it about 1225. Like all the others it is small, being only 180 ft. long by 80 in width. It is the only church now used for divine service, the remainder being in ruins.

One of the most remarkable churches in Wisby is that of the Holy Ghost, founded originally, it is said, in 1046. It is one of those double or two-storied churches so common in some parts of Germany, but in this instance displays peculiarities not found elsewhere.

The nave is an octagon about 52 ft. east and west. A square space in the centre is bounded by four stout pillars, between which the vault of the lower story is omitted, so as to leave an opening into the upper story. Four pillars of slenderer design support the vault of the upper church, and the whole, with the roofs, rises to about 100 ft. To the eastward is a choir, externally a rectangle, 32 ft. by 25, but internally semicircular at the eastern end.

The church most like this in Germany is perhaps that at Schwartz Rheindorf, mentioned above, p. 584. It also resembles the chapel at Freiburg (woodcut No. 608); but the most extended and indeed the typical example of a church of this class is St. Gereon's at Cologne (woodcuts Nos. 600 and 601).

The age of the church at Wisby is probably the middle of the 12th century, but without drawings it is impossible to judge with certainty of this.

The churches of St. Lawrence and St. Drothens both belong probably to the 11th century. That of St. Nicholas must be as late as the 13th, probably the end of it. The others range between these two dates, forming in themselves what is rarely met with—a complete and unaltered series of examples of the style.

Their most striking peculiarity seems to be that they are all small buildings like the Greek churches. There does not seem to have been any metropolitan basilica, or any great conventual establishment, but an immense number of detached cells and chapels scattered in groups all over the island, with very few that could contain a congregation of any extent. Till, however, they are investigated with care, and drawn, it is impossible to say whether this arose from any affinity to the Greek Church, or from some local peculiarity which we do not now understand.

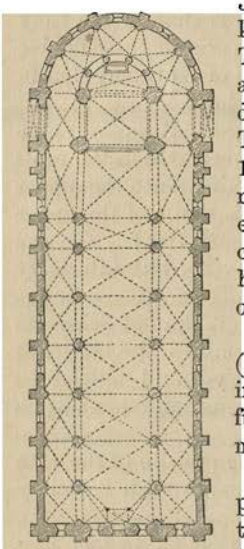
BORNHOLM.

On the island of Bornholm there exist a number of circular churches which have been sometimes described, yet never correctly drawn. They all apparently possess the peculiarity of four great pillars in the centre supporting the vault, and are remarkable for their massive rudeness of style rather than for any beauty of architectural design. So much indeed is this the case, that it has sometimes been doubted whether they owed their circular form and peculiar arrangement to ecclesiastical or to military considerations. If carefully examined and illustrated, they would be a valuable contribution to the history of circular churches of a very early age; but their architecture,

properly so called, is, it is to be feared, wholly without either beauty or interest.

Denmark.

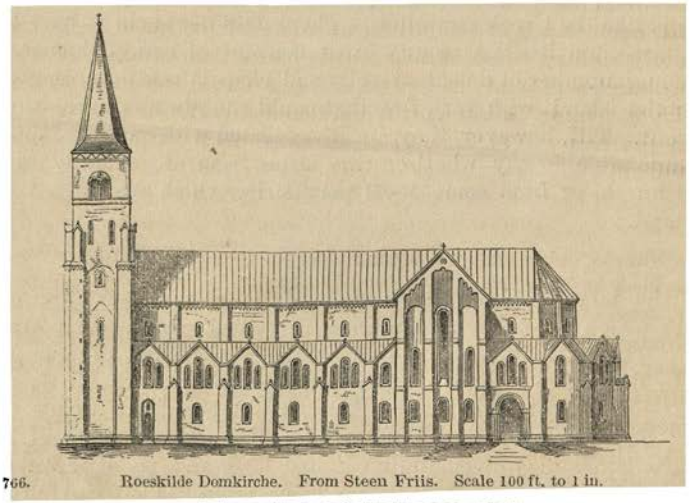
The most interesting church in Denmark is that at Roeskilde, in Jutland, which is now the burial-place of the kings, and the principal cathedral of the country. The original church was founded in the year 1081, and was then apparently circular, and of the same dimensions with the east end of the present edifice. This latter was commenced after the middle of the 12th century, and probably not completed as we now see it till towards the end of the 13th. The east end is probably one-half of the old round church rebuilt, the required enlargement of space having been obtained by a considerable extension of width towards the west.



765. Plan of Church at Roeskilde. From S. Friis. Scale 100 ft. to 1 in.

Its general dimensions, as shown in the plan (woodcut No. 765), are 270 ft. long by 80 in breadth internally. The whole area is only about 24,000 ft., and consequently not more than half that of most English cathedrals.

From the elevation (woodcut No. 766), it appears simple and elegant in its design, and contains the germ of much that is found afterwards in the churches of the neighbourhood, especially the range of small gables along the side of the aisles, marking externally each bay of the nave.[1] This is almost universal in the north of Germany, but seldom if ever found in France or England.



766. Roeskilde Domkirche. From Steen Friis. Scale 100 ft. to 1 in.

[1] The plan and elevation are taken from a description of the church by Steen Friis, published at Copenhagen, 1851. In both cuts the modern additions are omitted.

At Aarhuus is a somewhat similar church, commenced about the year 1200, but rather larger, being 300 ft. in length by 80 in breadth. Viborg, Ribe, and Mariboe also possess churches of some importance, but in their present state not remarkable for any points of architectural beauty.

SWEDEN.

The largest and finest church in Sweden is the cathedral at Upsala, commenced in the year 1287, from designs furnished by Etienne Bonneil, a Frenchman who was brought over for the purpose of building this church. It is consequently erected on the plan of an ordinary French cathedral of that age, but being of brick, and not having been completed till 1440, it is very inferior to the contemporary churches in France. Besides these disadvantages, it was erected in a country where the pointed Gothic was a foreign style, and ill understood by the native workmen, who carried on the works after the death of the original designer. From these causes it presents all the defects of the Italian pointed Gothic churches, without their beauty of detail and material. This cathedral was moreover thoroughly repaired, and its spires rebuilt, during the last century. Though its size therefore is equal to that of the smaller cathedrals of the same age in other countries, and though its age is the best, it is, as it now stands, an extremely uninteresting church.

The same remarks apply to the church at Lidkoping (1260–1500). It is somewhat less in size than the cathedral of Upsala, and without any western towers or other ornaments externally. It is arranged internally without that knowledge of the style which alone can give effect to its beauties.

Next in dimensions to these is the cathedral at Lund, originally built between the years 1080 and 1150; but since that time so altered and built upon that it is difficult to trace the original design, and there is certainly nothing to be admired in its present appearance.

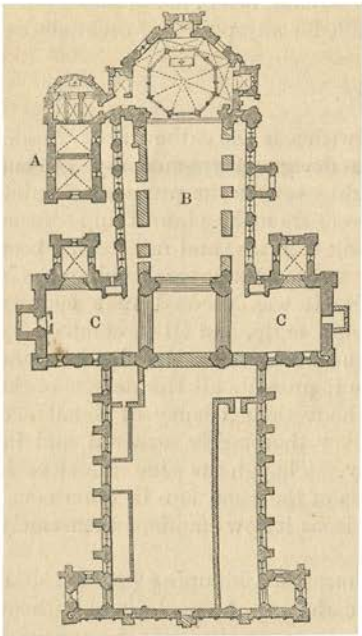
The churches of Westeraas, Stregnas, and Abo, are all large churches, about 300 ft. long by 120 in width, and founded between 1100 and 1200, but now possessing very little to deserve the attention of the architectural student.

NORWAY.

The Norwegians are more fortunate than either the Danes or Swedes in possessing at Trondhjem a national cathedral of great beauty and interest, even in its present ruined state.

Its history is easily made out from a comparison of local traditions with the style of the building itself. Between the years 1016 and 1030 St. Olaf built a church on the spot where now stands St. Clement's church, the detached building on the north, shown in plan at A (woodcut No. 767). He was buried a little to the south of his own church, where the high altar of the cathedral is now situated. Between the years 1036 and 1047, Magnus the Good raised a small wooden chapel over St. Olaf's grave; and soon afterwards Harald Haardraade built a stone

church, dedicated to our Lady, immediately to the westward of this, at B. This group of three churches stood in this state during the troubled period that ensued. With the return of peace in 1160, Archbishop Eysteen commenced the great transept c c to the westward of the Lady Chapel, and probably completed it about the year 1183. At that time either he or his successor rebuilt the church of St. Clement as we now find it. During the next sixty or seventy years the whole of the eastern part of the cathedral was rebuilt, the tomb-house or shrine being joined on to the apse of the Lady Church, as was explained in speaking of the origin of the French chevet (p. 621). In 1248 Archbishop Sigurd commenced the nave, but whether it ever was completed or not is by no means certain. In 1328 the church was damaged by fire, and it must have been after this accident that the internal range of columns in the circular part was rebuilt in the style of our earlier Edwards.



767. Plan of Cathedral of Trondhjem. Scale 100 ft. to 1 in.

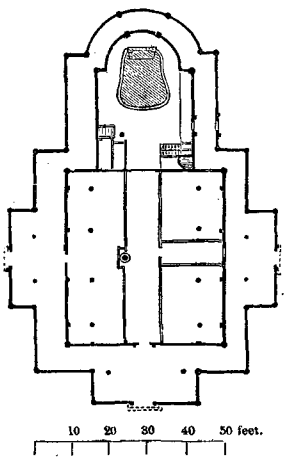
768 View of Cathedral of Trondhjem.

Thus completed, the church was one of the largest in Scandinavia, being 350 ft. long internally; the choir 64, and the nave 84 ft. wide. But its great merit lies more in its details than in its dimensions. Nothing can exceed the richness with which the billet moulding is used in the great transept. Its employment here is so vigorous and so artistic, that it might almost be suspected that this was its native place, and that it was derived from some wooden architecture usual in this country before being translated into stone.

The greatest glory of the place is the tomb-house at the east end. Externally this presents a bold style of architecture resembling the early English. Internally it is a dome 30 ft. in diameter, supported on a range of columns disposed octagonally, and all the details correspond with those of the best period of decorated architecture.

As will be observed from the plan (woodcut No. 767), the architect had considerable difficulty with all these rebuildings to bring the old and new parts to fit well together, and in consequence the walls are seldom straight or parallel with one another, and, what is most unusual, the choir expands towards the east. This is not, however, carried to such an extent as to be a blemish, and with a double range of columns down the centre would hardly be perceived, or if perceived, the effect would be rather pleasing than otherwise.

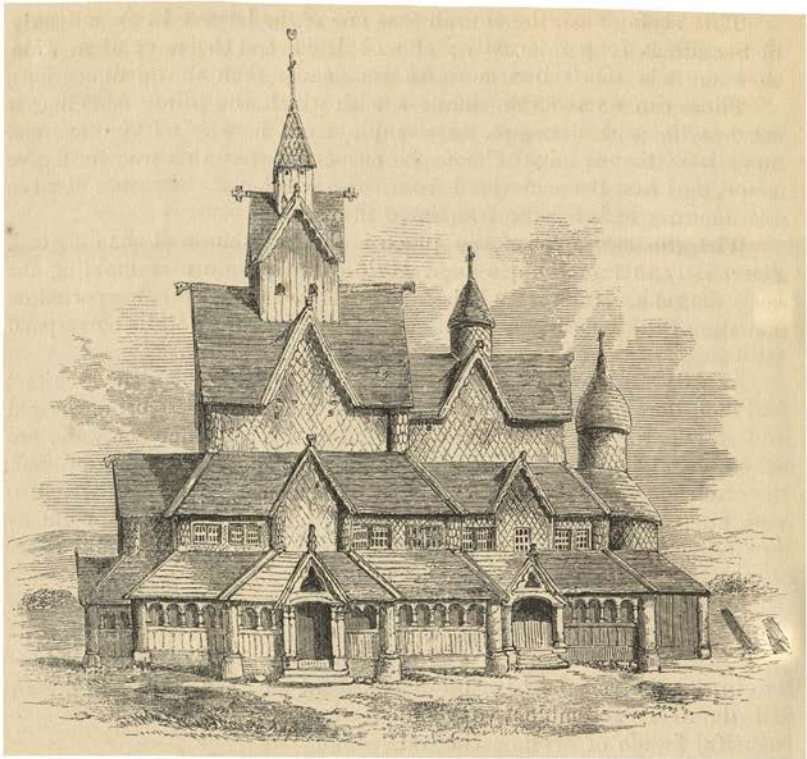
Had the western front been completed, it would have been one of the most beautiful anywhere to be found, not only from its extent (120 ft.), but also from the richness and the beauty of its details, belonging to the very best period of art, about the year 1300. In design and detail it resembles very much the beautiful façade of Wells cathedral. Like the rest of the cathedral, it is now in a very ruinous state, and, as will be seen by the view (woodcut No. 768), the whole is so deformed externally by modern additions, that its original effect can only be judged of by a careful examination of its details.



769. Plan of Church at Hitterdal.

The other stone churches of Norway do not appear to be remarkable. But there exists a series of wooden churches, of great interest to the antiquary, which is now fast disappearing from that country. Everywhere we read of the wooden churches of Saxon and Norman times in our country, and of the contemporary periods on the Continent; but these have almost all been either destroyed by fire or pulled down to make way for more solid and durable erections. That at Little Greenstead in Essex is almost the only specimen now remaining in this country.

The largest of those now to be found in Norway is that of Hitterdal. It is 84 ft. long by 57 across. Its plan is that usual in churches



770. View of the Church at Hitterdal. From Dahl's Holtz Baukunst in Norwegen.

of the age, except that it has a gallery all round on the outside. Its external appearance is very remarkable, and very unlike anything in stone architecture. It is more like a Chinese pagoda, or some strange creation of the South Sea islanders, than the sober production of the same people who built the bold and massive round Gothic edifices of the same age.

Another of these churches, that at Burgund, is smaller, but even more fantastic in its design, and with strange carved pinnacles at its angles, which give it a very Chinese aspect.

That at Urnes is both soberer and better than either of these, but much smaller, being only 24 ft. wide by 65 ft. from east to west. As may be seen from the view (woodcut No. 771), it still retains a good deal of the Runic carving that once probably adorned all the panels of the exterior, as well as the various parts of the roof. As these decayed they seem to have been replaced by plain timbers, which of course detract very much from the original appearance.

All the doorways and principal openings are carved with the same elaborate ornaments, representing entwined dragons fighting and biting each other, intermixed occasionally with foliage and figures.

This style of carving is found on crosses and tombstones, not only in Scandinavia, but in Scotland and Ireland. In its original form on wood it is only known to exist in these singular churches.

There can be no doubt about the age of these curious edifices, for not only does this dragon tracery fix them to the 11th or 12th century, but the capitals of the pillars and general character of the mouldings exactly correspond with the details of our own Norman architecture, so far as the difference of materials permits.

With the churches at Wisby these wooden churches certainly add a curious and interesting chapter to the history of architecture at the early period to which they belong, and are well deserving more attention than they have received.

771. Church of Urnes, Norway.

CHAPTER II.

POMERANIA.

CONTENTS.

Brick Architecture — Churches at Lubeck.

Along the whole of the southern shores of the Baltic extends a vast series of sandy plains, now composing the greater part of the kingdom of Prussia, with Mecklenburg and the duchy of Brandenburg. This district was to a considerable extent cultivated during the middle ages, and contained several cities of great commercial and political importance, which still retain many of their ecclesiastical and civil buildings.

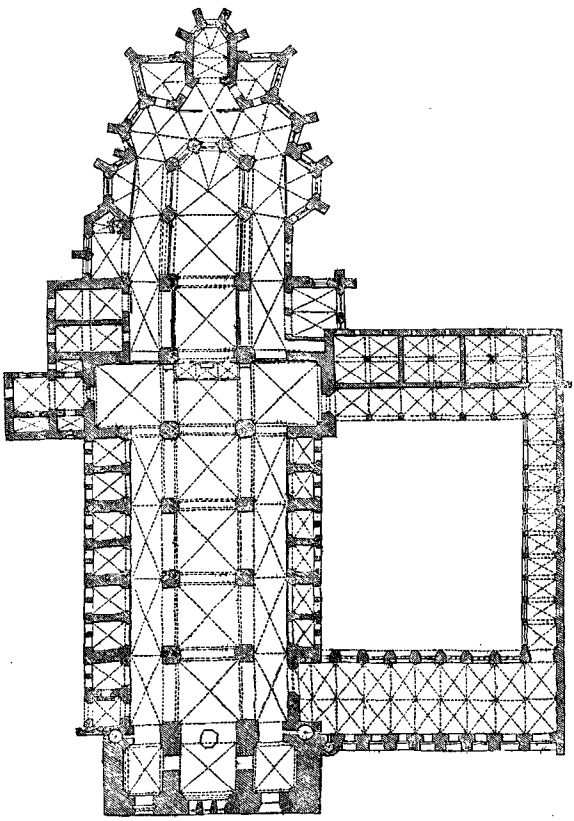
These plains being almost wholly without stone, nearly all these buildings are erected in brick, and principally from this cause display but little artistic merit.

It is true that in the hands of a refined and art-loving people like the inhabitants of the north of Italy, brick architecture may be made to possess a considerable amount of beauty. Burnt clay may be moulded into shapes as elegant, and as artistic, as can be carved in stone; and the various colours which it is easy to impart to bricks may be used to form mosaics of the most beautiful patterns; but to carry out all this with success requires a genuine love of art, and an energy in the prosecution of it, which will not easily be satisfied. Without this the facilities of brick architecture are such that it can be executed by the commonest workmen, and is best done in the least artistic forms. While this is the case, it requires a very strong feeling for art to induce any one to bestow thought where it is not needed, and to interrupt construction to seek for forms of beauty. In brick architecture, the best walls are those with the fewest breaks and projections, so that if relief and shadow are to be obtained, they must be added for their own sake; and more than this, walls may be built so thin that they must always appear weak as compared with stone walls, and depth of relief is almost impossible.

Another defect is, that a brick building almost inevitably suggests a plaster finishing internally; and every one knows how easy it is to repeat by casting the same ornaments over and over again, and to apply such ornaments anywhere and in any way without the least reference to construction or propriety.

All these temptations may of course be avoided. They were so at Granada by the Saracens, who loved art for its own sake. They were

to a considerable extent avoided in the valley of the Po, though by a people far less essentially art-loving than the Moors. But it will easily be supposed that this taste and perception of beauty exerted very little influence in the valley of the Elbe. There the public buildings were raised as cheaply as the necessities of construction would allow, and ornaments were applied only to the extent absolutely requisite to save them from meanness. Thus the churches represent in size the wealth and population of the cities, and were built in the style of Gothic architecture which prevailed at the time of their erection; but it is in vain to look in them for any of the beauties of the stone Gothic buildings of the same period.

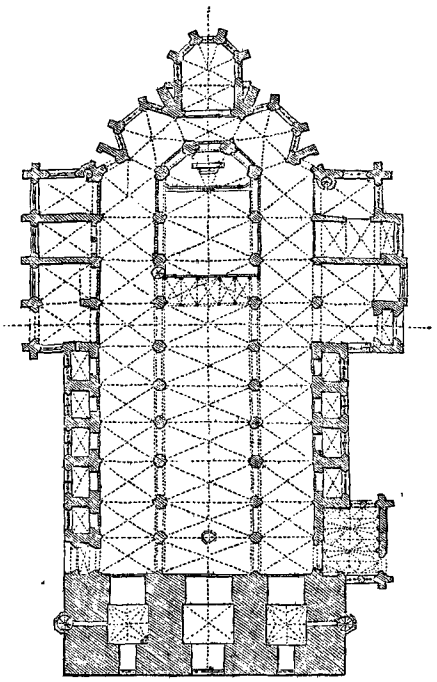


772. Cathedral, Lubeck. From Schlösser and Tischbein, Denkmale Lubeck. 100 ft. to 1 in.

The principal group of churches in this district is found at Lubeck, which was perhaps, in the middle ages, the wealthiest town on the shores of the Baltic. The largest of these is the Dom Kirche or Cathedral (woodcut No. 772), a building 427 ft. long over all. The nave is 120 ft. wide externally. The vaults of the three aisles spring from the same height, the central one being 70 ft. high, those of the side

aisles a little less. This, with the wide spacing of the piers, gives a poor and bare look to the interior. The choir is better, showing a certain amount of variety about the chevet; but even this is leaner than any stone building, and displays all the poverty on which we have remarked.

The Maria Kirche is a more favourable specimen of its class, though by no means so large. It is of a somewhat earlier age, and built more in accordance with the principles of Gothic design. The central aisle is 130 ft. high; the side aisles only half as much. This allows space for a very splendid clerestory, which, if filled with stained glass, would redeem the flatness of the mouldings and the general poverty of the architecture of the interior.



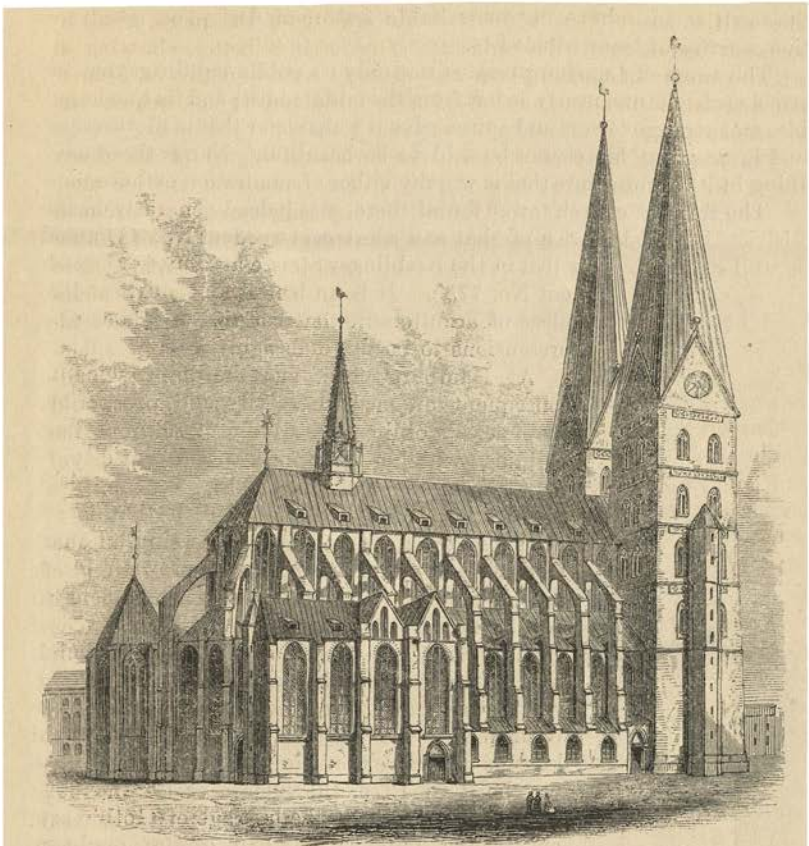
773. Church of St. Mary, Lubeck.
100 ft. to 1 in.

The church of St. Catherine is smaller than either of these, though of about the same age as that last mentioned, and of as good a design. It possesses the somewhat curious peculiarity of having a double choir, like that of San Miniato, near Florence (woodcut No. 381). The whole of the lower choir is vaulted over, and a second, at a height of 20 ft., forms an upper choir over its whole extent.

There are several smaller churches in Lubeck, none of which show any peculiarities not found in the larger. The same faults which characterise the interior of these churches are also found in the exterior. The Maria Kirche (woodcut No. 773) is the best of them in this respect, but though its outline is good, it is far from being a pleasing specimen of architecture. Its two western towers are of the form typical in Lubeck. They are just 400 English ft. in height, and with these dimensions ought to be imposing objects, but they certainly are not so, being in fact as bad specimens as could be of Gothic towers.

As usual in Germany, there is no door at the west end, and the principal entrances to these churches are lateral; one of those attached to the cathedral is an elaborate and beautiful piece of stone architecture, but it is the only one apparently that is at all remarkable.

Some of the rood screens are covered with carving, and the tabernacles, or receptacles for the holy elements, are, as in most parts of



774. Church of St. Mary, Lubeck. From Schlösser and Tischbein.

Germany, elaborately ornamented. They are nearly of the same age and of the same style as those at Nuremberg, one of which is represented in woodcut No. 618.

Dantzic possesses several large churches very similar, both in style and arrangement, to those of Lubeck. The principal of these is the cathedral, or Marien Kirche, commenced in its present form in 1343, and completed in the year 1502. It is 316 feet long and 105 in width, with a transept extending to 206 feet. The whole area of the church is about 42,000, so that though not among the largest, it may still be considered as a first class church; and, being of a good age, it is as effective in design as any of the brick churches of the province. It has one tower at the west end 230 feet in height.

The church of St. Catherine is in part older than the cathedral, having been founded in 1185, though it was to a great extent rebuilt at a subsequent period. Its dimensions as it now stands are 210 feet long, 120 wide over all. Neither it nor any of the other churches of

the town seem to have any remarkable feature of design or construction worthy of being alluded to.

The town of Luneburg retains not only its public buildings, but its street architecture, nearly as left from the middle ages; and its quaint gables and strange towers and spires give it a character that is picturesque and interesting, but cannot be said to be beautiful. Nor is there anything in its architecture that is worthy either of admiration or imitation.

The form of church tower found there, and indeed generally in the district, is a modification of that at Paderborn (woodcut No. 451), and is well exemplified by that in the Kœblinger Strasse at Hanover (woodcut No. 775). It is an honest and purpose-like piece of architecture, but certainly without any pretensions to beauty of design.

775. Tower in the Kœblinger Strasse, Hanover.

At Hamburg, fires, and the improvements consequent on modern activity and prosperity, have nearly obliterated all the more important buildings which at one time adorned that city.

At Konigsberg, at the opposite extremity of the district, there seems to be little that is remarkable, except a cathedral, possessing an enormous façade of brickwork, adorned with blank arches, but without the smallest pretensions to beauty, either internally or externally.

The most remarkable among the civil buildings of the province is the castle at Marenburg, which was for nearly a century and a half the residence of the masters of the once powerful knights of the Teutonic order. The Alte Schloss was built in 1276, the middle castle in 1309; so that it belongs to the best age of Gothic art; and, being half palace, half castle, ought to possess both dignity and grandeur. It betrays, however, in every part the faults of brick architecture in this province, and though curious is certainly not beautiful. All the windows are square headed, though filled with tracery, and the vaultings of the principal apartments are without grace in themselves, and do not fit the lines of the openings; even the boldly projecting machicolations, which in stone architecture give generally such dignity to castellated buildings, here fail in producing that effect, from the tenuity of the parts and the weakness of their apparent supports.

The town hall at Lubeck is imposing from its size, and singular from the attempt to gain height and grandeur by carrying up the main wall of the building high above the roof, or where any utilitarian purpose can be suggested for it. Indeed there are few towns in the province that do not possess some large civic buildings, but in all instances these are less artistic than the churches themselves; and, though imposing from their mass and interesting from their age, they are hardly worthy of notice as examples of architectural art.

CHAPTER III.

HOLLAND.

CONTENTS.

Churches — Civil and Domestic Buildings.

HOLLAND is almost as rich in churches as Belgium, and far more so than any of the countries last described, possessing many erected in the best age of mediæval architecture. Several of the churches of Holland are large, and their general arrangements unexceptionable. Notwithstanding this, hardly one of them can be considered comparable, as an architectural object, with those of the same age in France or England, or has ever been regarded as worthy of study or admiration. A great deal of this is no doubt owing to their being generally built of brick, like those mentioned in the last chapter, in consequence of which they have all the leanness and want of design which is the usual fault of brick architecture. Besides this, the style was not indigenous in Holland. No round arched Gothic building is found within the limits of the country which was erected after its separation from Germany, nor any trace of progress or elaboration in any part of the style. The Dutch seem to have borrowed it from their neighbours, and used it as they found it, without much thought, neither caring for its beauties nor troubling themselves to understand its principles.

Judged by their dimensions alone, the churches of Holland ought to be almost as interesting as those of Belgium. They are generally large, with lofty and well-proportioned aisles. The transepts project boldly. They have frequently tall and not ungraceful western towers, and often large windows filled with good tracery, though mostly of a late age. Notwithstanding all these requisites of a perfect Gothic church, there is not one of them that must not be considered a failure from the causes before mentioned.

These remarks apply especially to the great churches at Haarlem, Leyden, and Rotterdam, and the two at Delft, the older of which contains some details worthy of attention. That at Gouda is remarkable for the beauty of its painted glass, though the architecture of the church is very unworthy of so brilliant an ornament.

The church at Dort is older than most of these, and has a venerable look about it that hides many of the faults of its architecture, but it will not bear examination.

The churches of Utrecht and Bois le Duc are to some extent exceptions to the general poverty of design which characterises the

churches of Holland. This is owing probably to the situation of these two churches on the verge of the province, and their proximity to Belgium and Germany. That at Utrecht consists now of merely two fragments—a choir and a tower, the nave that joined them having been destroyed by a storm and never replaced. What remains is good late German, though much disfigured by modern additions. The church at Bois le Duc is still a large and richly ornamented church, with a good deal of stone-work about it; but being too large for the decaying town in which it stands, it has suffered much from neglect, and is now in a very ruinous condition.

The church at Kampen, on the Zuider Zee, is better than most others, and many of the smaller churches on the borders of the province are worthy of more attention than they have received. There are few abbeys or monastic buildings of any importance to be found, such establishments having never been suited to the industrious character of the Dutch people.

Bad as are the churches of Holland, the town halls and civic buildings are even worse. There is not, in the whole of the Netherlands, one that can be classed as a work of fine art. Even age has been unable to render them tolerably picturesque; nor are there in the province any belfries with their picturesque forms, nor any palaces worthy of note, belonging to the middle ages. The older dwelling-houses are sometimes picturesque and pleasing, but less so than those of Belgium. Most of them are unpretending specimens of honest building, the result of which is often satisfactory; and combined, as they generally are in Dutch towns, with water and trees, and with the air of neatness and comfort which pervades the whole, we sometimes scarcely feel inclined to quarrel with the want of the higher elements of art when so pleasing a result has been produced without them.

BOOK X.

BYZANTINE.

CHAPTER I.

CONTENTS.

Origin of Style — St. Sophia's — Other Churches at Constantinople — Churches in Greece — Byzantine Orders — St. Mark's, Venice.

THE term Byzantine has been so indiscriminately and so incorrectly applied to styles invented by people who hardly knew the name of Byzantium, and to forms of art which have not the slightest affinity with those practised in that capital, that it is now difficult to confine it within its true and only signification. Properly speaking, it applies only to that form of art invented in Constantinople after its virtual separation from the Western Empire, and practised by the Greek Church during the whole of the middle ages.

As now used, the name comprises every building possessing a dome, every style in which that form was at all usual, and every form of architecture in which polychromy was adopted to any extent. The latter is now known to have been common to all true styles, whether ancient or modern, and consequently far from being peculiar to Byzantine art; and it must not be forgotten that the Romans were the true inventors of the domical form as applied to large buildings. From Rome it went to Constantinople, and from the same source also came the few insignificant attempts at domes in the Western Empire.

In the following pages the term Byzantine will be restricted exclusively to the architecture of the Greek Church as it arose under Justinian, and continued, down to the 16th or 17th century, to be practised in all the Christian countries of the East. It will make this clearer if we recapitulate, as briefly as possible, the leading features of the history of art at this period, as it is more fully developed in another part of this work.

During the three centuries which elapsed from the age of Augustus to that of Constantine, the Roman form of architecture prevailed from the shores of the Atlantic to the valley of the Euphrates; and all round the shores of the Mediterranean, with the slight exception of Egypt, which for some time retained her own style. It was however a period of transition, and before Constantine assumed the purple a vast change

had come over the style. It had departed more and more from the columnar arrangements of the Greeks, in the place of which arches, together with domical and vaulted forms, had gradually come into use; and a new architecture was almost completely invented before the change of religion seemed to demand it.

During the next two centuries, from the time of Constantine to that of Justinian, a style prevailed which may properly be called the Romanesque, or Christian Roman, differing but slightly from the Pagan Roman, which preceded it. The same style continued to be practised in Rome itself during nearly the whole of the middle ages; and in Florence, Pisa, and generally along the western shores of Italy, till a late period. In Lombardy, and in all those parts of Europe to which the Indo-Germanic barbarians penetrated, and which they subdued, the Romanesque was superseded by the barbarian styles, properly called Gothic, which entirely revolutionised the art, giving it new vigour and greater variety and beauty than either the Roman or Romanesque was capable of attaining.

Owing to the paucity of examples, and the imperfect mode in which those which do exist have hitherto been examined, it is not so easy to define exactly the changes which took place in this style in the East. We know that the circular temple of the Minerva Medica, that in Diocletian's palace at Spalatro, the baptistery of Constantine at Rome, the church which he built over the Holy Sepulchre at Jerusalem, and the round churches at Ravenna and elsewhere, are all very nearly identical in style; and that the church at Bethlehem, and the basilicas at Rome and Ravenna, are in like manner modifications of the basilicas of Pagan Rome; and as far as verbal descriptions can be relied upon, we may assert the same of the early churches at Antioch, Alexandria, and Constantinople.

At a very early period the separation commenced between the churches of the East and the West. These two great divisions of the Empire were inhabited by different races of people, and it was consequently impossible that they could practise the same religious forms, or be content with the same styles of art. At some future period it may be possible for us to trace the origin and progress of this schism in art. At present we must be content to begin our history with the age of Justinian, when the revolution was nearly complete, and Byzantine architecture had assumed an independent form, widely differing both from the Romanesque and from the Gothic, and which contained within itself the germ of all that was more fully developed in the succeeding ten or twelve centuries.

It is necessary therefore to bear in mind that there are three great divisions of true Christian art:—

First, the Romanesque, or Christianised Roman;

Secondly, the Gothic, or that style which was practised by the Teutonic and Celtic races wherever they predominated in Europe;

And, thirdly, the Byzantine, or the style used by all the Slavonic races of Europe as distinguished from the Teutonic, and generally by all nations professing the Greek form of the Christian religion. This

last division comprehended the whole of Eastern Europe, nearly all Christian Asia, Christian Africa, and Sicily, till the Church in those latter countries was overwhelmed by the Saracens. Its influence was felt also, to some extent, in the architecture of the western shores of the Adriatic, especially at Venice, which in the 10th and 11th centuries had far more affinity with the Eastern than with the Western Empire; and it also penetrated through the descendants of the Greek colonists of Marseilles into the south of France.

These, however, were rather influences than direct importations; and except the one example of St. Mark's Church at Venice, there is no building in the Western Empire that comes strictly within the limits of the present chapter, which will consequently be devoted wholly to Constantinople and those countries which derived their arts from that city.

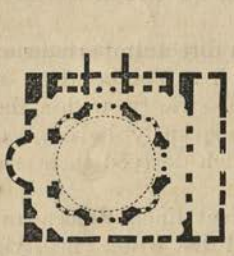
When we assert that the Byzantine is the direct lineal descendant of Roman architecture, it must be borne in mind that when one style is derived from another with a difference, that difference itself must also have had some source, though we cannot always trace it. In other words, any distinctly new style must be descended from more than one previously existing form.

In the present instance our information is still very deficient, but we can see that in the East a domical astylar form of architecture was very prevalent, and extended certainly very nearly to the Hellespont, if it did not pass it. The most typical form of this style is that known as the Sassanian, described in an earlier part of this work. We cannot, it is true, assert that it was invented by the Sassanidæ. Indeed, from its being a domical style, and indulging in circular forms, it arose far more probably among their Parthian predecessors, or some Scythian or Tartar race; but it certainly was carried further, and to a greater degree of perfection, by the Sassanian kings of Persia than by any other people of that age.

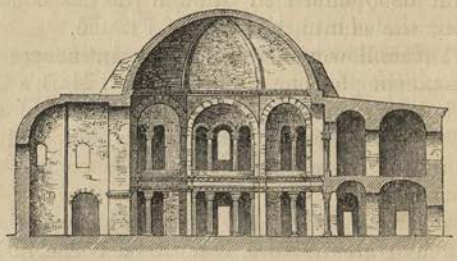
As far as we know, the Sassanian style first assumed a definite shape and form about the age of Constantine, and arrived at its highest pitch before Justinian ascended the throne. It is exactly such a style as, amalgamated with the architecture of Rome, would produce the style we are about to describe; and it will be very interesting, as our knowledge of Asia Minor advances, to trace the steps by which this domical and vaulted style gradually displaced the wooden roofs with their columnar supports, which formed the staple of Greek and Roman architecture.

As we are unable, from our ignorance of the intermediate examples, to trace the history of the style in the East during the period that elapsed between Constantine and Justinian, it is fortunate that we now possess two undoubted examples of the buildings of the last-named Emperor still remaining in Constantinople, and unaltered in all their principal parts. These are now known as the Greater and Lesser Sta. Sophia, but the latter is more correctly termed the church of Sts. Sergius and Bacchus, having been dedicated to those martyrs. Externally it is a rectangle of about 87 ft. by 103. Internally it consists of

a large square chamber surmounted in the centre by a dome 47 ft. in diameter, resting on eight piers, alternating with pairs of pillars which support a gallery or upper story which runs all round it. To the west is the narthex, which is an invariable accompaniment of a Greek church, and opposite to this the apse. On the south side are a range of tribunes, probably designed to keep off the heat of the southern sun.

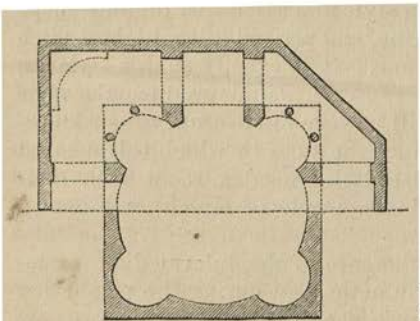


776. Church of Sergius and Bacchus.
Scale 100 ft. to 1 in.



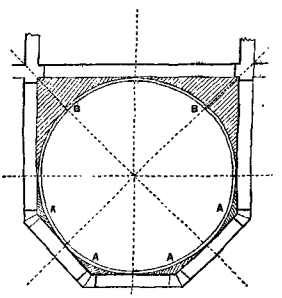
777. Section of Church of Sergius and Bacchus From A. Lenoir, Architecture Monastique.
Scale 50 ft. to 1 in.

Thus arranged, the building contains nearly all the elements of a complete Byzantine church, which we are thus enabled to trace back to their sources. As we have already seen in Rome, the original and simple way of supporting a dome was on a circular drum of solid masonry, as in the Pantheon for instance. The solemn grandeur of this form was perfectly suitable for a very simple building, such as a tomb; but when a portico was to be added, or when other chambers or other buildings were to be arranged around it, the inconvenience of the circular shape was immediately felt. This was partially avoided by the substitution of the octagon, as in the temple in Diocletian's palace at Spalatro (woodcut No. 252); but far more effectually by placing the inner circle in a square inclosure, and then making the spaces in the angles into great niches, as in the lower part of woodcut No. 778, so that considerable lightness and variety were obtained, and very little room sacrificed. To increase the dimensions of either a circular or square building covered by a dome resting on solid walls, it is necessary to increase the size, and consequently the weight and thrust of the dome. This involves all the constructive difficulties which render the use of domes so rare. To get over these difficulties the Romanesque architects devised the following expedient. They built an octagon or square *outside* the space intended to be covered by the dome, as shown in the upper part of the last woodcut. Immediately under the dome they left only the 8 piers at the angles of the



778. Diagram of Byzantine arrangement.

octagon. These supported the downward pressure of the dome, while its outward thrust was resisted by the roofs which covered the space between the outer walls and the dome, and by the outer walls themselves. This method had the additional advantages of enlarging the space on the floor, and of giving to the interior great variety of perspective, and a much better and more effective gradation of parts than could be obtained by the simpler arrangement. This process produced the church of St. Vitale at Ravenna (woodcut No. 392) from the original octagon, and this church of St. Sergius and Bacchus at Constantinople, as shown in the last woodcut, from the square. In both these instances the lines of the original walls were retained, the walls being replaced by columns supporting galleries, on which was an upper tier of columns, extending to the roof. As long as the Byzantine architects were content to confine themselves to domes placed on octagons, or supported by eight piers, they had no great difficulties to contend with in the adaptation of the covering to the substructure. The octagon is practically so near a circle, that all that is required is a small bracket in every angle as shown at A A, woodcut No. 779, and the dome fits at once and easily on its base. It was felt however that this mode of construction practically limited the church to the space below the dome; and even if this were made 100 ft. in diameter, the church was virtually a hall of that size only, surrounded by galleries and niches. An attempt was therefore made to get over this difficulty by placing the dome on four instead of eight piers: to effect this it was necessary to fill up the whole angle of the square by a great bracket, as shown in the last woodcut at B B, which was in itself a constructive problem of no small difficulty.



779. Diagram of Byzantine Pendentives.

It has already been explained (pp. 433–440) that the Saracenic architects obviated some of this difficulty by the adoption of pointed arches for their pendentives. The Byzantines did not adopt this expedient, at least at this early age, but boldly proceeded to construct them by bracketing out to the required extent; and even in Justinian's age they accomplished that task at Sta. Sophia's with a degree of success that was not surpassed till the construction of the dome over the tomb of Mahomet at Beejapore (p. 439 *et seqq.*).

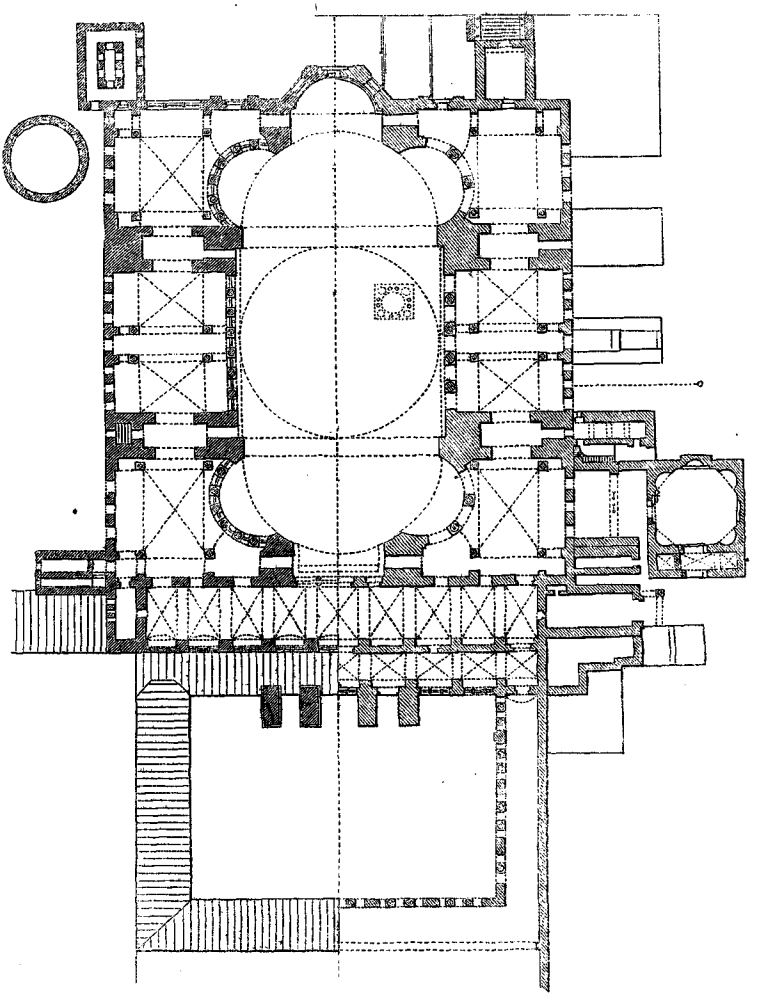
The advantages to be gained by this mode of construction were obvious, and enabled the architect to extend his building in any direction he chose, without contracting any of its dimensions. It gave him the power of adding domes or semi-domes of any required size or form, so as to carry up the eye by degrees to the great dome, and by contrast of dimensions to give that apparent size which is one of the great objects kept in view by all true architects.

It was the working out of this system of construction which pro-

duced the church of Sta. Sophia,[1] by far the largest and finest specimen of Byzantine architecture.

Sta. Sophia.

This church was commenced by Justinian in the tenth year of his reign, on the ruins of one erected by Constantine, but destroyed by fire in that year. It was completed within six years from the date of its foundation, but 20 years afterwards was much injured by an earth-



780. Upper Story and Ground Floor. Plan of Sta. Sophia, 100 ft. to 1 in.

[1] All the information regarding Sta. Sophia, and all the illustrations, are taken from a splendid monography of this cathedral by W. Salzenburg, published at Berlin in 1854

731. Section of Sta. Sophia at Constantinople. Scale 50 ft. to 1 in.

quake. In the course of the restoration which ensued several alterations and additions were made, but whether the *exo-narthex* or outer porch was added then, or at a later period, is by no means clear; it certainly was not part of the original design, but was built at some time during the Christian occupation of the city. Excluding this and other minor excrescences, the church is externally a parallelogram of 237 ft. by 284, and covers about 67,000 square ft. of ground, which is nearly the average space occupied by a first-class French or English mediæval cathedral.

Externally it possesses absolutely no architectural beauty, at least in its present state. When first erected it may have been adorned, or intended to be adorned, with coloured marbles, or tiles, or mosaics, thus making up in richness of colour for its deficiency of form. If such ornaments were ever applied to this building they have perished, and subsequent additions and mechanical contrivances to remedy constructive defects have so altered and concealed whatever of design it may originally have possessed, that we must now regard its external appearance at least as a failure. Internally the contrary is the case. The narthex consists of two very beautiful halls, one over the other, 202 ft. in length internally, by about 26 in width. The church itself is nearly an exact square of 229 ft. north and south by 243 ft. from east to west, surmounted in the centre by a great dome, 107 ft. in diameter, rising to a height of 182 ft. from the floor of the church. East and west of this are two semi-domes of the same diameter. These are again cut into, each by three smaller semi-domes, supported by two tiers of pillars. On the lower range of these stands a gallery, extending all round the church except at the apse. To the north and south instead of the semi-domes the galleries are surmounted by a wall, pierced with 12 small windows, the whole forming a screen on these sides, so that the church, instead of showing a Greek cross, as is usually asserted, is virtually contracted in the centre, and in plan more the shape of an hour-glass, the galleries with their supports parting the central from the surrounding parts with a more distinct separation than that of the side aisles in a Gothic church. The narthexes, the galleries, and the apse, are lighted by two ranges of windows, which extend all round the church. The central nave is lighted by one great western window and a number of smaller openings pierced in all the domes just above the springing. The great dome has 40 windows at its springing; the greater and smaller semi-domes have only 5 each. It is by no means clear when this practice of piercing windows in the dome was first introduced; this appearing to be the earliest example known of such a mode of lighting. It could hardly have been used here to such an extent without some previous experiments; but be this as it may, it excited universal admiration, and few Byzantine domes were afterwards erected without its adoption. It may, nevertheless, be disputed whether the introduction of these windows here was expedient or not; it gives lightness but apparent weakness to the construction, and a large combination of windows in the lunettes over the north and south screens would, it seems, have answered all the purpose, with better constructive and probably with better artistic effect.

From the above description it will be perceived that the dome of Sta. Sophia is nearly of the same diameter as that of St. Paul's at London, but is 33 ft. less in height internally. This is altogether in favour of Sta. Sophia's, as the dome of St. Paul's has too much the appearance of a great disproportioned hole in the roof. The lowness of the Byzantine example gives the effect of great space, which is materially aided by the two semi-domes which abut on it, and the eye is gradually carried downward through three series of domes of different dimensions till it meets the smaller architectural piers and the supporting pillars of the galleries. The smallness of these objects and their details gives immense value to the larger expanse of the roof. We find in fact here all the great principles of design which guided the mediæval architects in their interiors, and were known also to the ancient Greeks, who used in preference two tiers of columns, even in their limited interiors. The dome itself is only about two thirds of the size of that of the Pantheon at Rome, but the whole unsupported expanse of the central aisle is nearly double that of the Roman temple, and owing to the judicious manner in which the parts are used, is in appearance far more than double: indeed it may be safely asserted that, considered as an interior, no edifice erected before its time shows so much beauty or propriety of design as this, and it is very questionable whether anything in the middle ages surpassed it, though it is difficult to institute a comparison between forms so totally different. It is certain that no domical building of modern times can at all approach Sta. Sophia's, either for appropriateness or beauty. If we regard it with a view to the purposes of Protestant worship, it affords an infinitely better model for imitation than anything our own mediæval architects ever produced. It must be borne in mind also that it depended, internally at least, almost wholly on colour for the effect of its details, and these being in the published views of it generally drawn in outline make it look poor and lean. The pillars are all of variously coloured marbles, which are also used to line and cover the lower part of all the walls except where they are adorned with mosaics, and the whole of the roofs, both of the nave and aisles, were, and indeed are, covered with gold and mosaics of the utmost richness and beauty, so that the same effect which is produced at St. Mark's, Venice, with inferior skill on a smaller scale, is here to be found in the perfection of the best age of that peculiarly Byzantine art. Taken altogether there is no building erected during the first thirteen centuries after the Christian æra which, as an interior, is either so beautiful or so worthy of attentive study as this, and it is consequently much to be regretted that it has been so difficult to obtain access to it. Were it better known, its beauties could not fail to be appreciated.

As before remarked, we are still without the materials requisite to enable us to trace distinctly the various steps by which the classical details gradually took the form we find prevalent in the buildings of the age of Justinian.

There is apparently one, and only one Romanesque church now remaining in Constantinople, that of St. John, illustrated in Salzenburg's work, but which reached me too late to notice it in its proper place.

It is a simple basilica, 125 ft. long by 85 in width externally. It is divided internally into three aisles by ranges of columns supporting galleries. These are of the Corinthian order as well as those of the narthex, and show the exact extent to which the transition had proceeded at the age when this church was erected (A.D. 463).

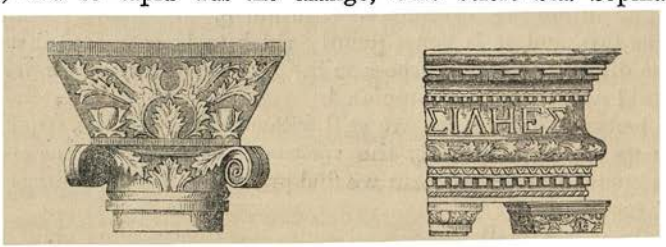
782. Pillar in Church of St. John, Constantinople.

Standing as it does half-way between the buildings of Constantine at Jerusalem and those of Justinian at Constantinople, there is just such a change as we should expect.

If we turn to the two woodcuts, Nos. 405 and 406, we shall observe that the orders shown in those two examples are much more classical than that of the church of St. John (woodcut No. 782).

On the other hand the latter differs much more considerably from the four examples quoted below from the buildings of Justinian, the progress having been rapid when once the style became independent, though the classical feeling was probably retained in the capital longer than in the provinces, where its influence was naturally less enduring.

From this we pass at once to the church of S. Sergius and Bacchus, where the capitals and details, though based on the more purely classical types, still differ from them so much that they may be considered as the first examples of the new rather than the last of the expiring style; and so rapid was the change, that before Sta. Sophia was

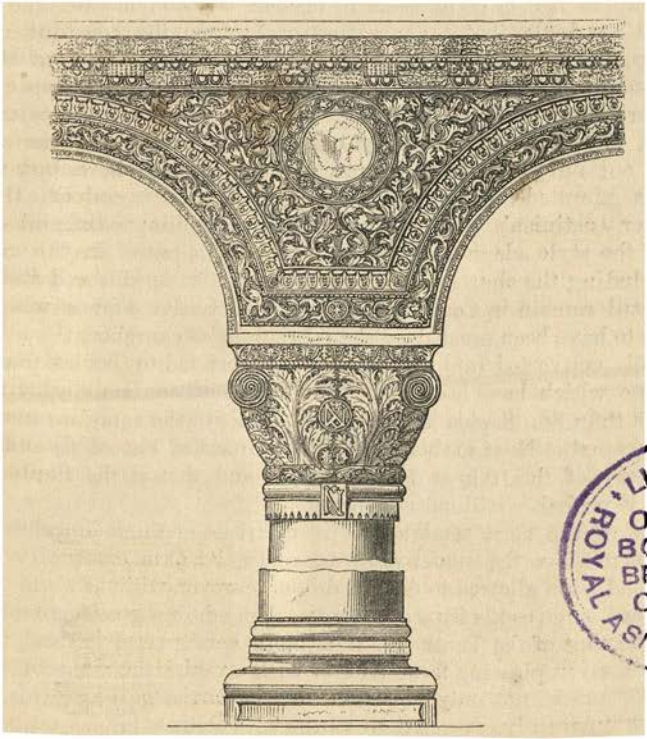


783. Capital from Sergius and Bacchus. From Lenoir.

784. Entablature from Sergius and Bacchus. From Lenoir.

completed, even that trace of classicality had almost entirely disappeared. The representation (woodcut No. 783) of a capital in the church of Sergius and Bacchus, for instance, shows an Ionic capital with a fragment of an architrave over it, but the two so grown together, if the expression is allowable, as to make one of those square capitals afterwards much used to support the springing of arches. In the time of Constantine, as for instance in the so-called mosque of Omar (woodcut No. 406), we find the architrave used as a block, but the capital below it is classical, and the horizontal entablature still runs from pillar to pillar. In Justinian's time the arch generally springs directly from the column, and neither in Sta. Sophia, nor in the churches at Ravenna, is the horizontal entablature to be found. Sometimes a cornice of somewhat classical form is supported by piers, or runs round the walls of the church, or as the front of the gallery floor; but even then it is widely different from anything to be found in classical times.

The perfected Byzantine style is better shown in the next two examples from Sta. Sophia. Woodcut No. 785 shows the capital and one of the spandrils of the lower tier of arches on each side of the nave, No. 786 the corresponding parts of the upper tier. The details of both are of great beauty, though the forms of the capitals are not so pleasing in outline as those which either preceded or followed.



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785. Lower Order of the Church of Sta. Sophia. From Salzenburg.

The lower order illustrates very perfectly the great characteristic of Byzantine ornament as compared with the classical, inasmuch as the whole pattern is here *incised* which in classical times was *applied*. If we take, for instance, a Roman Corinthian capital, the acanthus leaves are so distinctly applied that they might be cut away without injury even in appearance to the constructive propriety of the bell-shaped cap; the same is true of the necking of the Greek Ionic, and of all the ornaments of the entablatures of all the orders; and generally throughout the middle ages in the West the same system was pursued. In the East this was never the case after the final separation of the styles. The surface always remained flat, and the pattern was cut into it without breaking its outline.

786. Upper Order of Sta. Sophia. From Salzenburg.

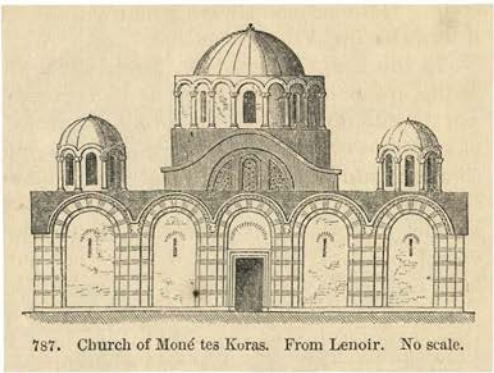
In the lower order at Sta. Sophia it is slightly moulded, afterwards in the upper it is filled in, so as to become a sort of mosaic, and there can be no doubt that the practice arose from the constant use of mosaics, and from the necessity of bringing the other parts of the decoration into harmony with them. Shadow and relief are appropriate and pleasing with fresco painting, but flatness is the very essence of mosaic, and the rich projecting carved work of a Corinthian order would not only have looked strangely out of place here, but would have exaggerated this flatness to a painful extent.

After Justinian's time every classical trace disappears, and every part of the style adapts itself to the new exigencies.

Including the churches of Sta. Sophia and St. Sergius and Bacchus, there still remain in Constantinople at least twelve edifices which are known to have been erected by the Christians as churches, though now generally converted into mosques or appropriated to secular purposes. Of those which have been illustrated or described, one slightly more modern than Sta. Sophia is that of Sta. Irene, in the seraglio, now used as an arsenal. Next to this were the churches of Theotocos and Moné tes Koras, of the 10th or 11th century, and that of the Pantocrator, which is probably still more modern.

One of the most remarkable peculiarities of these churches is the attempt to allow the tunnel-vault to retain its form externally, as the dome had been allowed to do. A dome, however, without some central ornament, such as the Saracens always applied, or a great central opening, like that of the Pantheon, if a mere hemisphere, is, and always must be, an unpleasing form, and so with a vault; the want of a ridge of some sort is, not only constructively but artistically, a fault. The Romans apparently covered their vaults with plates of bronze, which were too precious to be allowed to remain, and when removed the wet perco-

lated through and the vault fell in. It was this difficulty, as has been already explained (p. 598), that first led to the introduction of the pointed arch in the south of France. The pure Byzantine architects, however, never adopted the pointed arch in any of its forms, and as Constantinople from its foundation to the present day has always been more subject to conflagrations than perhaps any city in the world, they tried to dispense wholly with wood in their ornamental constructions, and adopted therefore the simple round arch for the *extrados* or outer covering as well as for the *intrados* or inner surface of their arches; this is well shown in the elevation (woodcut No. 787) of the façade of the church called Moné tes Koras, or House of the Virgin. Here the back of the arches is left quite plain and without relief. This is certainly not pleasing, and unless the exterior of the vault is protected by a covering of metal, it is hardly possible to make it permanently water-tight. The only important church in western Europe roofed in this manner is St. Mark's at Venice, where the exterior of the vault was originally treated in the way just described, though in after times the nakedness of the form was disguised by Gothic tracery. This woodcut also illustrates another peculiarity that was adopted almost immediately after the completion of Sta. Sophia, of giving the lower part of the dome, externally, a perpendicular form to the height of the windows, and consequently making the curved part less than a hemisphere: subsequently the height of the drum was increased and the dome placed upon it, as in modern Italian churches; but this could only be done in domes of small dimensions, more deserving, perhaps, the name of cupolas.



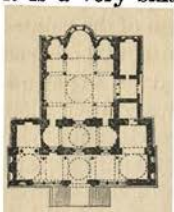
787. Church of Moné tes Koras. From Lenoir. No scale.

The smallness of all the domes of the Byzantine churches after the age of Justinian was no doubt in a great measure owing to the constructive difficulty, pointed out above, of placing a dome on pendentives. Another cause was the decline of the empire, not only in wealth and power, but in all the higher aspirations and aims, and the consequent want of energy or ability to carry the style farther than it had reached in the time of Justinian, or even to attempt to equal his great work.

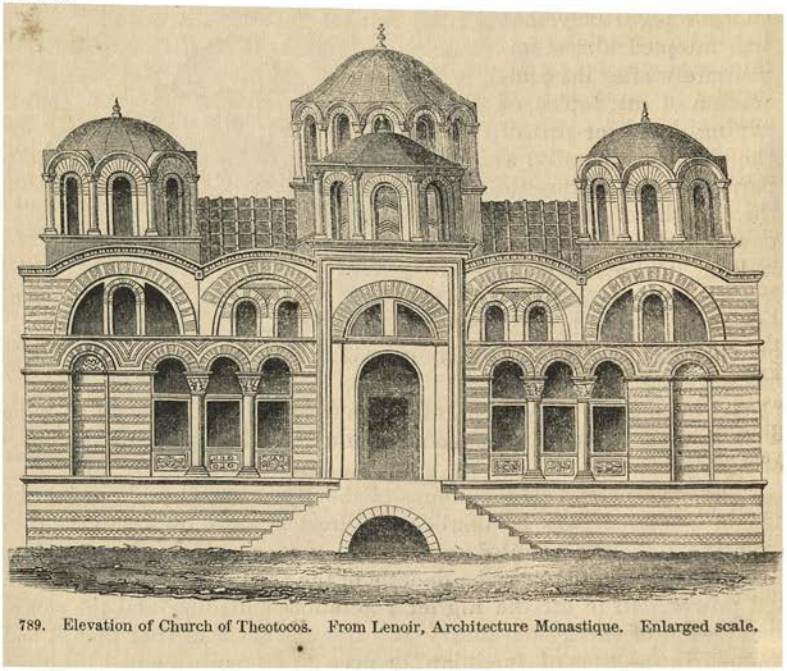
Among the churches of Constantinople the most complete is that called the Theotocos (Mother of God), erected apparently in the 10th or 11th century, and exhibiting Byzantine architecture in all its completeness, wholly emancipated from all classical traditions, and worked into as complete a style as the Gothic of the same age.

Like all the Byzantine churches erected after the age of Justinian,

it is a very small edifice. As will be seen from the plan (woodcut No. 788), internally it is only 37 ft. by 45, and although its inner and outer narthexes add considerably to its dimensions, it still would be but a small parish church in England. Its façade is rich and varied in design, and the cupolas group pleasingly together. The arrangement too of the east end (woodcut No. 789) shows a pleasing variety of outline and detail, which redeems, to a great extent, the smallness of its size. Among other peculiarities it shows those curious angular sinkings with which the Byzantines marked their apses externally, instead of allowing them to project beyond the line of the roof. All this, however, is easily accomplished where the principal dome is barely 14 ft. in diameter, and the other parts proportionately so small as to cause no constructive difficulties. There is nothing here that could not be practised on a larger scale, and that would not be improved by being so used.



788. Plan of the Theotocos. Scale 100 ft. to 1 in.



789. Elevation of Church of Theotocos. From Lenoir, Architecture Monastique. Enlarged scale.

The Pantocrator is a triple church, or rather three churches placed side by side, the central one of which was apparently meant as a sepulchral building by Alexius Comnenus or his empress Irene, who seem to have been the founders of it in the beginning of the 12th century. This arrangement, it will be recollected, is the same as that of the church at Nisibin (see p. 524), and may have been more usual in the East than we are at present aware of.

It is probable that the other churches of Constantinople are neither remarkable for the size nor the beauty of their decorations, but every fragment of this style is so interesting that it is much to be hoped that with the present increased opportunities of examination our knowledge of its remains may receive important accessions.

SALONICA.

With the single exception of Constantinople, there is perhaps no place in the ancient Greek empire which contains so many or such interesting churches as the city of Salonica, the ancient Thessalonica. M. Texier enumerates[1] no less than 37 of these as now existing, either in ruins or converted into mosques, and many of them still retain not only their original architectural form, but even their mosaic decorations.

Of these the oldest and the most interesting is the circular church of St. George. In plan it almost perfectly resembles the Tomb of Helena (woodcut No. 282), or those in the Spina of Nero's Circus (woodcut No. 366), but it is very much larger than either, being 124 ft. in diameter over all. Internally the walls, which are 22 ft. in thickness, are hollowed out into 8 great niches, one of which serves for the entrance, and opposite to this is a well-defined choir with its apse, evidently a part of the original arrangement. The central part is surmounted by a dome 80 ft. in diameter, which like the lower part is divided into 8 compartments, each containing a large mosaic painting of a saint with his name written in Greek characters, and the name of the month over which he presided and in which he ought specially to be worshipped. Behind each of these is a splendid architectural composition, the details of which forcibly recall the mural paintings of Pompeii and the compositions of the rock-cut tombs of Petra, such as the Khasnè (woodcut No. 288). The date of this church is not exactly known, but from its details we may safely assert that it is not so early as the mosque of Omar at Jerusalem, nor so late as the church of Sergius and Bacchus at Constantinople: its probable date is about the year 400 A.D.

Next in interest and importance is a great five-aisled basilica dedicated to St. Demetrius, the patron saint of the city. It was originally built in 597, but destroyed by fire in 690, and rebuilt or repaired as we now find it immediately after that date. Many of the details of the stone-work belong to the earlier period, and resemble very much those of the church of Sergius and Bacchus at Constantinople. The central aisle is 40 ft. in width, the side-aisles 16 ft. each. The pillars of these support a gallery running the whole length of the church. It possesses a transept like the Roman basilicas, and a simple apse terminates the central aisle. There are also some chapels and buildings attached which add very much to the interest of the whole.

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[1] The only account of these churches which has been published is in Texier's Description de l'Asie Mineure, vol. iii. There are no plates attached to this, but through the kindness of the author I have had access to his original drawings.

These two churches, both by their style and arrangements, might more properly be called Romanesque than Byzantine, but the limits between the two styles are so imperfectly defined that we must wait for further information before attempting to make a classification.

There is another three-aisled basilica, now called Eski Djouma by the Moslems. It has an inner and outer narthex, each about 23 ft. in width. Internally the church is 137 ft. long by 50 in width, and a gallery runs over the side-aisles.

The church of Agia Sophia is built in the form of a Greek cross, and surmounted by a cupola 33 ft. in diameter. The choir is 24 ft. in length, and this, with the vault of the church, is ornamented with a very curious and interesting painting of the Transfiguration, dating, with the church, probably from the 7th or 8th century.

The Apostles' church, of about the same date, is square in plan, and with the usual accompaniment of two narthexes.

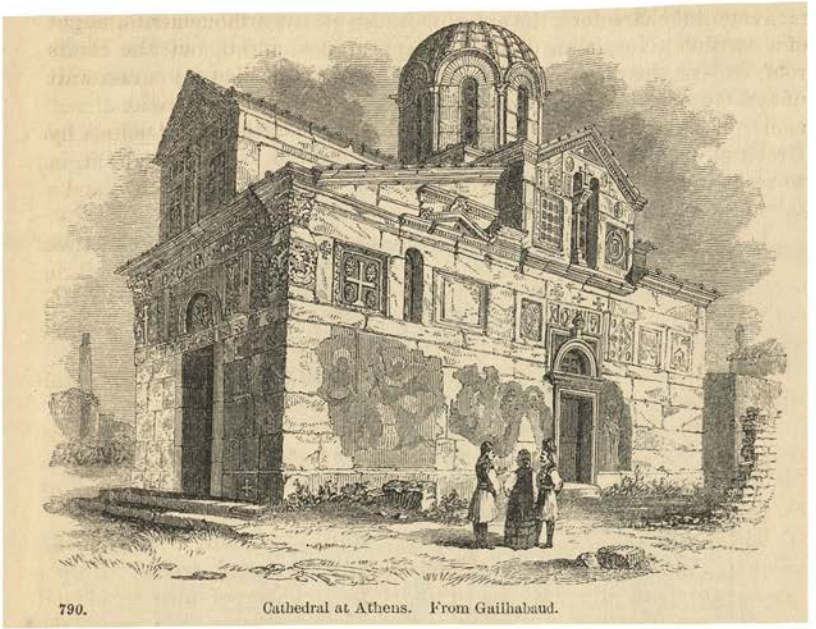
The church of St. Bardias was constructed 987, and very much resembles the contemporary church of Moné tes Koras at Constantinople (woodcut No. 787). One of the most modern apparently is that of St. Elie, erected in 1012 A.D.

These are perhaps the principal, but they are only a few of the monuments of this city, and which, if fully illustrated, would fill up a great gap in our illustrations. Indeed the number of unnoticed and unedited monuments in this one place justifies more and more the belief that the materials do still exist for restoring entirely the records of this last chapter in our history.

Greece.

There are no doubt numberless churches in the towns and villages of this district which would fill up all the gaps in the history of Byzantine architecture. At Mount Athos there are at least 100 buildings of various sorts and of all ages, but all these are as yet architecturally unknown, being only described in words that convey the impressions of their authors, but not the forms of the buildings. Remains of great interest may probably still exist in those towns that were of great importance in the early ages of Christianity; and though we may hope at some future period that these may be added to our illustrations of art, at present we must pass them by to speak of the Christian churches of Greece, which are better known.

Of these one of the oldest and most elegant, though one of the smallest, is that formerly known as the Catholicon or Cathedral of Athens. As a cathedral its dimensions are, to our notions, ridiculously small, its extreme length and breadth being only 40 feet by 25. It is interesting as being probably anterior to the age of Justinian, and perhaps the oldest Greek church now in existence. There are so many ancient fragments mixed up in its construction, and so much of the ancient artistic feeling of Athens pervades its forms, that we may be deceived in judging of its age from its style, though that is the only evidence we can reason from. It is almost the only Greek church that has sculptured instead of painted decorations externally, and the



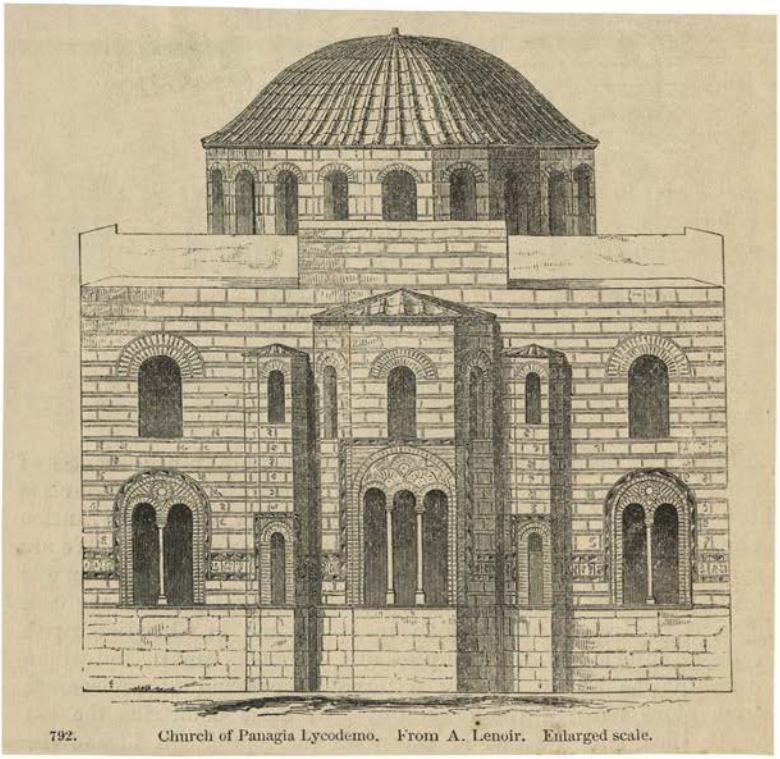
790. Cathedral at Athens. From Gailhabaud.

depth of its cornices and the structure of its roof are reminiscences of a classical age very rare in Byzantine architecture. This church is perhaps the most profusely decorated externally of all Byzantine churches, which are plainer in this respect than any others. We are not surprised at this in Constantinople itself, where the interior was the principal object, and therefore superbly decorated; but the case is different in Greece, where both in Pagan and in Christian times the cells or interiors of the temples are extremely small, and where the worship was almost wholly external, consisting of processions or ceremonious fêtes in the open air. In these countries the use of the Basilica, connected as it was with the republican idea of the people assembled within the building, was almost wholly unknown. Still, however small the Greek churches might be, and however incapable of containing a large congregation, it is nevertheless the case that all the decoration is confined to the painting and mosaics of the interior, while the exterior (though originally painted also) is left in comparative insignificance, depending on its domes and general outline for any effect it may produce.

791. Plan of Panagia Lycodemo. Scale 100 ft. to 1 in.

The largest and finest of the Athenian churches is that of St. Nicodemus (Panagia Lycodemo), but even its size is very insignificant, its extreme breadth being only 45 feet and its length 62, and the dome, which is supported on 8 piers, 21 feet in diameter. Still the arrangement of the building internally is such that considerable architectural effect is obtained with even these small dimensions, and the points of support are so proportioned to the mass as to give it a very

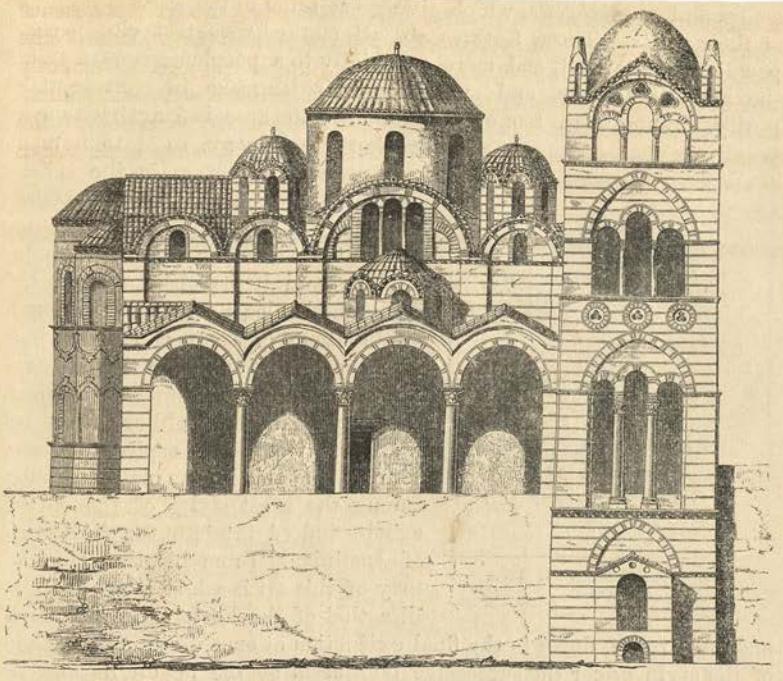
monumental character: the exterior is also pleasing, though the absence of a cornice gives it an unfinished appearance, and the outline of the roof, except the dome, is not seen. The result of this part is certainly unsatisfactory. It may be taken as a type, both as to style and dimensions, of several hundred buildings erected for the purposes of the Greek church during the middle ages, before the Western style began to react upon the architecture of the East.



792. Church of Panagia Lycodemo. From A. Lenoir. Enlarged scale.

793. Plan of Church at Misitra. Scale 100 ft. to 1 in.

Of a somewhat later age and different style is the church of the Virgin at Misitra in the Peloponnesus, the ancient Sparta. Its dimensions are 56 feet by 43. It possesses, besides the orthodox porch, an open lateral arcade and a belfry, in both which peculiarities it resembles the churches of Sicily more than those farther North. Indeed it is questionable whether at least one of the styles of building in Sicily in the 11th and 12th centuries would not be more properly called Byzantine or Greek than Gothic. At all events, many Sicilian churches display so great a similarity to those of Greece that it is impossible to overlook the connexion. It is at the same time evident that of the two the Eastern was the older and influencing style.

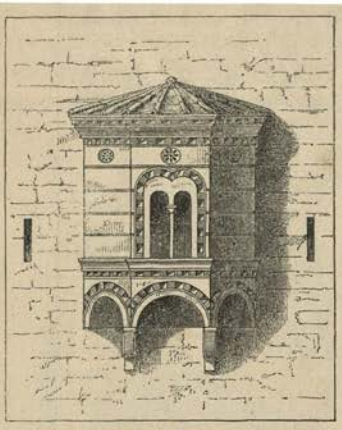


794. Church at Misitra. From Cauchaud, Eglises Byzantines en Grèce. Enlarged scale.

Where arcades are used externally in these Greek churches, they are generally supported by pillars of somewhat classical look crowned by capitals of the square foliaged form, used everywhere to support arches in the early styles all over Europe, and the windows, when divided, take merely the form of diminutive arcades. The Byzantines never attained to tracery; all their early windows are simple, round headed openings. These afterwards were grouped together in threes and fives, and as in the Gothic style, when these could be put under one discharging arch, the pier was attenuated till it became almost a mullion, but it still always supported a constructive arch, and these seem never to have had a tendency to run into interlacing forms like the Gothic. The universal employment of mural painting in Byzantine churches, and the consequent exclusion of painted glass, rendered the use of such large windows as the Gothic architects employed quite inadmissible; and in such a climate very much smaller openings sufficed to admit all the light that was required. Thus tracery would in fact have been an absurdity. The Byzantine architects sought to ornament their windows externally by the employment of tiles or colours disposed in various patterns, so as to produce a very pleasing effect, as may be seen from the woodcut (No. 792) illustrating the apse of the Panagia Lycodemo at Athens, and other specimens quoted above.

Occasionally we find in these churches projecting porches or bal-

conies and *machicolations*, which give great relief to the general flatness of their walls. These features are all marked with that elegance so peculiar to the East, and more especially to a people descended from the ancient Greeks, and speaking their language in considerable purity. Sometimes, too, even a subordinate apse is supported on a bracket-like balcony, so as to form a very pleasing object, as in the specimen from Misitra shown in woodcut No. 795.



795. Apse from Misitra. From Cauchaud.

On the whole the Byzantine style may be said to be characterised by considerable elegance, with occasional combinations of a superior order, but after the time of Justinian the country was too deficient in unity or science to attempt anything either great or good, and too poor to aspire to grandeur, so that this has no claim to rank among the great styles of the earth, except indeed through the buildings of Justinian. From his time the history of this art is a history of decline, like that of the Eastern Empire itself and of Greece, down to the final extinction at once of the empire and of the style under the successive conquests by the Venetians and by the Turks. The only special claim which the Byzantine style makes upon our sympathies or attention is that of being the direct descendant of Greek and Roman art. As such, it forms a connecting link between the past and present which must not be overlooked, and in itself it has sufficient merit to reward the student who shall apply himself to its elucidation.

St. Mark's, Venice.

The celebrated church of St. Mark's at Venice is one of those exceptional buildings which it is most difficult to classify correctly. From its locality and size it ought to belong either to the late Romanesque or early Gothic style, but it certainly cannot be ascribed to the former, and still more clearly must it be admitted that it has no affinity with the other. The fact seems to be, that at the period at which it was erected Venice belonged much more to the Eastern than to the Western Empire, though situated just within the boundary that is generally supposed to mark the limits of the Gothic world. Feudality never was established within the territories of the republic; all her relations were with the East, and her great national cathedral is a fair reflex of the fact. Not only is its design purely Byzantine, but all its decorations belong to the same school, and are unlike anything found in any other church of the West.

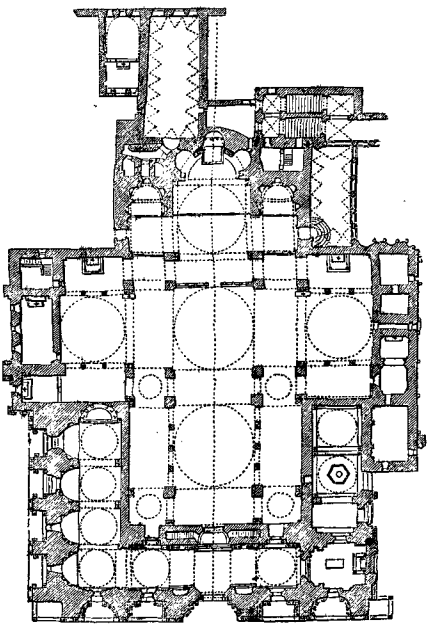
The foundations of the church were laid in the year 977, and the building seems to have been completed nearly a century afterwards, or

in the year 1071. The mosaics and interior decorations occupied 10, some say 20 years more, so that it was not dedicated till the year 1085 or 1094.

The building then completed was probably only the cross surmounted by the 5 domes. The porticos, which surround three sides of the nave, were probably added afterwards, though within the limits of the next century. The upper sides of the vaults were at this age left plain, without outer covering or ornament, like those of the Moné tes Koras (woodcut No. 787). The ogee canopies which now surmount them, the foliage and pinnacles between them, all belong to the florid Italian Gothic of the 14th century. These details, although not quite appropriate to the style, are beautiful, not only from the exquisite taste with which they are executed, but also as relieving and adorning the plainness of the outline of the façade to which they are attached.

The dimensions of the church internally are 205 ft. from east to west by 164 ft. at the transepts. Externally these dimensions are 260 and 215 ft., and it covers 46,000 ft., so that, although of respectable dimensions, it cannot be called a large church.

The great peculiarity of its design, as shown in the plan (woodcut No. 796), is that, like St. Front, Perigeux (woodcut No. 486), it has 5 equal sized cupolas, disposed in the form of a cross, and resting on broad arches which run back to the walls; but to prevent the squareness of the church from making it look either too short or too low, the central aisle is circumscribed with screens of columns which have no constructive use, and are employed merely for the purpose of decoration. They represent the screens which support the galleries at Sta. Sophia, but with this difference, that there they are indispensable parts of the construction.

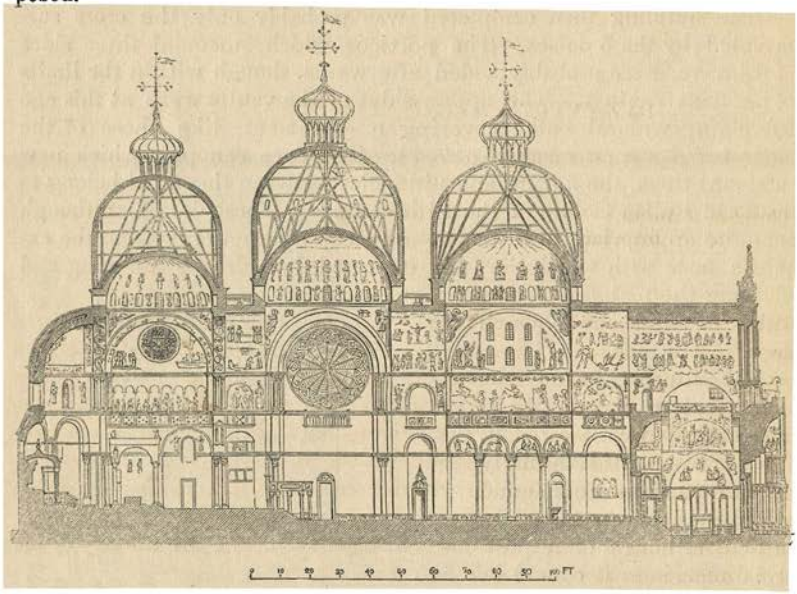


796. Plan of St. Mark's, Venice.

The great glory of St. Mark's internally is the truly Byzantine profusion of gold mosaics which cover every part of the walls above the height of the capitals of the columns, and are spread over every part of the vaults and domes, being in fact the real and essential decoration of the church, to which the architecture is entirely subordinate.

Externally its great beauty consists in the profusion of marble columns which surround and fill all the front and lateral porches. Like

those in the interior they have no constructive office to fulfil, but they are in themselves rich and beautiful, and are most picturesquely disposed.



797. Section of St. Mark's, Venice. From Chiese Principale di Europa.

Our knowledge of Byzantine architecture is so limited that we cannot point out with certainty whence the design of this church was taken. The probability is that it was copied from the original church of St. Mark at Alexandria, which was pulled down in the year 829, when St. Mark's body was brought thence to Venice. It is not unlikely that many of the pillars now standing at Venice were at the same time brought from the church at Alexandria. The Venetians, moreover, at that age were far less familiar with Constantinople than with the great Christian capital of Egypt. Consequently it is to that city that we should look for the models from which the design of St. Mark's was taken, were it not that all architectural monuments at Alexandria have perished.

CHAPTER II.

BYZANTINE ARCHITECTURE IN ASIA.

CONTENTS.

Churches at Ancyra — Hierapolis — Other churches — Armenia — Cave Churches — Inkermann — Cathedral at Ani — Decoration — Tombs.

THERE is considerable difficulty in writing an account of the Byzantine architecture in Asia. This does not arise either from the paucity of examples or their insignificance, but because it has happened here even more than in Europe that they have hitherto failed to attract the attention of travellers; and the few examples that have been published have neither been selected as the best suited to illustration, nor have they been accompanied with such discriminating remarks as would make up for the deficiency in materials. We are able to do little more than to point out the leading divisions of the history of the style, and its more remarkable features.

The history divides itself naturally into two great periods :—

The first from the time of Justinian till the rise of the Seljukian dynasties in the 11th century, at which time the troubles of the country and the persecutions of the Christians that preceded the Crusades put a stop to anything like church building in the western parts of Asia.

The second epoch includes about three centuries, the 11th, 12th, and 13th, when the Christians, though oppressed in the west, flourished in Armenia, Georgia, and the provinces about the Caucasus, till their independence and power were destroyed by the irruptions of Gengis Khan and his successors.

As the examples of the first period are, at present at least, almost wholly confined to the western parts of Asia Minor, it will be convenient to speak first of them, and to treat Armenia as a separate architectural province, as its typical style is not found farther west, and, with very few exceptions, no churches exist there belonging to the earlier epoch.

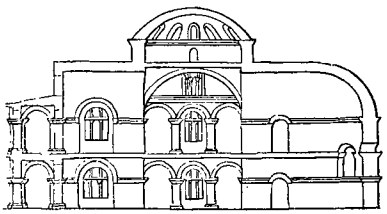
When we consider how early Christianity was adopted in all the principal cities of Asia Minor, and how important the seven churches of Asia became in the very first centuries of our era, it is impossible to avoid the conclusion that large and important edifices were erected for the celebration of Christian rites even before the time of Constantine; and so strongly and so well did men build in those days, that it is almost certain that remains of them must still exist.

But when the conversion of Constantine gave distinction and security to the church, and when the example was set by the mag-

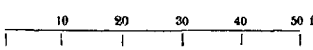
nificent churches which he erected not only at Rome and Constantinople, but at Jerusalem and Antioch, there can be little doubt that all the more important churches must have been extended or rebuilt, and that edifices as splendid as those of the capital must have adorned the greater provincial cities. All that are at present known of these are the few examples quoted in the chapter on Romanesque architecture, to which they properly belong.

Of the churches which belong more properly to the Byzantine style, so far as we can at present ascertain, there are in Asia Minor two types—one a class of cupola churches with a resemblance to Sta. Sophia, and another without cupolas, which look much more like modifications of the Basilica, though very much altered from that original.

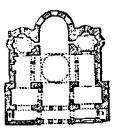
One of the oldest churches of the first class is that of St. Clement at Ancyra, which is probably only slightly more modern than Sta. Sophia; for although the style shows more completeness in this example, and greater freedom from all classical trammels, that is probably more owing to its locality than to its age, being erected in a province where Roman buildings were scarce, and where probably Christian churches had been erected for some time previously.



798. St. Clement, Ancyra. From a drawing by Ed. Falkener.



As will be seen from the plan (woodcut No. 799), its dimensions are small, being only 64 ft. long by 58 ft. in width. In its centre it is crowned by a cupola only 17 ft. in diameter, pierced with eight windows.



799. Church of St. Clement, Ancyra. 100 ft. to 1 in.

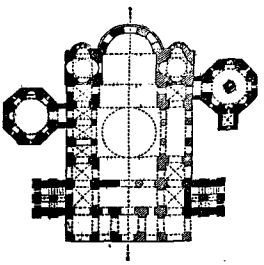
Like almost all the churches of this age it has two narthexes placed one above the other, the upper communicating with a series of broad galleries running all round the church, which are generally supposed to have been appropriated to the female part of the congregation.

It will also be observed that the two circular buildings which were detached at Pergamos (woodcut No. 402) are here incorporated with the design, and look like the rudiments of the triapsal arrangement that was afterwards so frequently adopted.

Another church very similar to this is found at Myra, dedicated to St. Nicholas. It exceeds that of St. Clement in size, and has a double narthex considerably larger in proportion, but so ruined that it is difficult to make out its plan, or to ascertain whether it is a part of the original structure, or added afterwards. The cupola is raised on a drum, and altogether the church has the appearance of being much more modern than that at Ancyra.

A third church of the same class, and better preserved, is found at Trabala in Lycia. It is of the same type as that of St. Clement, and similar in its arrangements to Sta. Sophia, except in the omission of

the semidomes, which seem never to have been adopted in the provinces, and which indeed may be said to be peculiar to that church. Notwithstanding the beauty of this feature, it appears to have remained dormant till revived by the Turks in Constantinople, and there alone.[1]



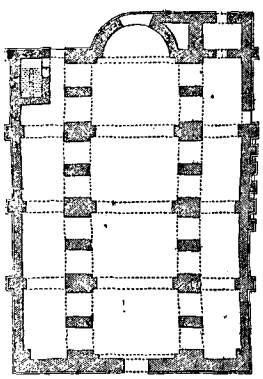
800. Church at Trabala. Scale 100 ft. to 1 in.

In this example there are two detached buildings, either tombs or sacristies, of an octagonal form, which, except in large detached buildings, does not seem to have been so common as the circular till after the time of Justinian.

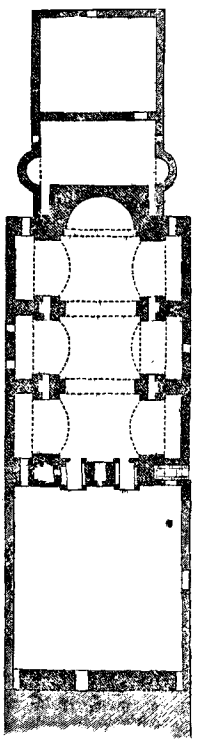
If the second description of churches in Asia Minor are as common as there is reason to believe that they are, this circumstance may force us to modify considerably our usual definition of Byzantine architecture. The buildings in question either are of an age anterior to Justinian, and consequently are Romanesque, or else it is certain that a class of churches very like basilicas, and without cupolas, co-existed with the domical churches in Asia Minor, at least till the decline of the Christian and rise of the Mahometan religion in that country.

My own impression is that they should be classified with the Romanesque, but so little is known of their dates, and so few of their details have been drawn, that it is better to leave the question undecided till more is known, and in the mean time to class them simply according to their locality.

The two finest churches of this class known are found at Hierapolis, on the borders of Phrygia. The largest (shown in plan, woodcut No. 801) is a bold vaulted church in three aisles, 177 ft. long internally by 115 wide; its central aisle being 45·6 ft. between the piers, which are massive in the extreme.



801. Great Church at Hierapolis. Scale 100 ft. to 1 in. E. Falkener del.

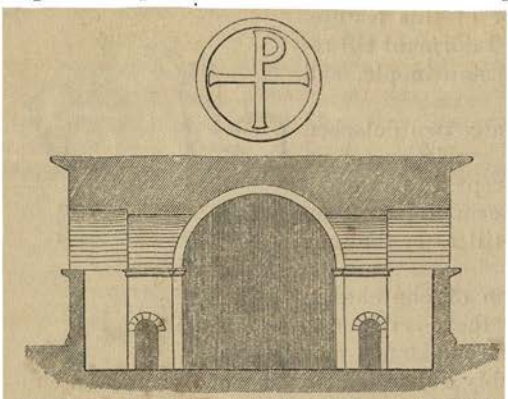


802. Church at Hierapolis. Scale 100 ft. to 1 in. E. F. del.

The other shows more design in its arrangements, and though smaller, being 145 ft. by 89, is of extremely elegant design. As may be seen from the section (woodcut No. 803), the whole construction of

[1] See p. 467.

the church rests on the piers, the side walls being mere screens carried up to the point where the lateral vaulting commences. In this way large semicircular openings are left above these screens, which admit more than a sufficiency of light, but the greater part of them is concealed by the deep recesses formed by the piers. The central vault is 44 ft. wide, while those intersecting it are so much smaller that they do not cut into it to such an extent as to be unpleasing. Altogether this is a very beautiful example of a vaulted basilica, and perhaps among the very oldest buildings of that description. No basilicas in the Romanesque style are vaulted, and there is probably nothing of the kind to be found so complete as this till we arrive at the Gothic age after Charlemagne. This church has every appearance of belonging to an earlier period than that.[1]



803. Section of Great Church at Hierapolis. Scale 50 ft. to 1 in. From a drawing by E. Falkener.

Besides these there is a church at Pinara, 50 ft. by 81 internally, which has still more the character of a basilica, its aisles being divided by pillars which supported a wooden roof. At Ephesus there are remains of a very curious double church, but so ruined that it is difficult to make out its plan. The western church is in plan like those at Ancyra or Trabala, surmounted by a dome 40 ft. in diameter. Behind this on the same alignment is another church, 95 ft. square, exclusive of the apse, divided into three aisles by pillars. It is possible that this may be the older of the two, to which the other was added.

Another interesting group of churches is found at Derbe, three of which have been drawn by Mr. Falkener. They are very small, the largest only 50 ft. by 33. Two of them partake of the basilica form; the third is a small church with cupolas.

The circular form does not seem to be common for detached churches in these provinces. One very handsome church at Hierapolis is circular externally, but its interior is brought by piers into the form of an octagon, which supports, or once supported, a dome 68 ft. in diameter, the internal dimensions of the whole being 101 ft. It seems so constructively beautiful that it probably belongs to the same age as the smaller of the two churches at the same place, described above (woodcut No. 802).

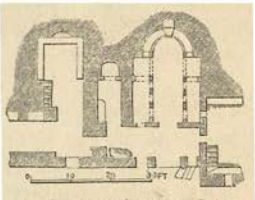
[1] For the last four woodcuts I am indebted to the kindness of my friend Mr. Ed. Falkener, who, having travelled in these countries, has examined and drawn a great number of the churches, and possesses information that goes far to supply the deficiencies we so much lament.

There is another circular church at Derbe of nearly the same dimensions, but probably of more modern date, and a third at Antiphellus, which, judging from the plan, looks more like an erection of the Crusaders than anything belonging to a more ancient period.

It will be impossible to give a connected history of the Byzantine style till the details of these churches are drawn and compared. We may be confident that a complete series of examples can be made out by the assistance of the Christian churches in Constantinople and elsewhere, the dates of which are authentically known.

ARMENIAN STYLE.

The eastern or Armenian province of Byzantine architecture is better known than the western. Still the subject is by no means simple or easy, inasmuch as around the roots of the Caucasus are grouped, and apparently have been from very early times, representatives of all the nations of the earth, who still preserve their individuality, and with it their styles of art, with remarkable tenacity, but which the imperfect data at our command do not enable us to distinguish.



804. Rock-cut Church at Inkermann.
From Dubois de Montpereux.

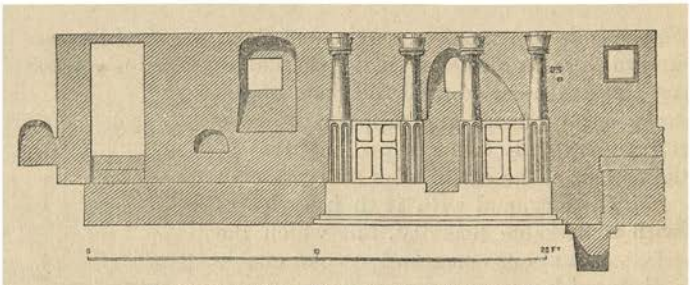
The churches here are so numerous, and being for the greater part still occupied by Christian worshippers are so much more prominent, that it has been impossible for travellers to pass them over, although the ruined and deserted edifices in the Mahometan districts on the more western shores of Asia might easily be overlooked by those not specially occupied with the subject.

805. View in Church Cave at Inkermann.

The series here commences with a numerous class of rock-cut churches, which are certainly extremely curious as specimens of Christian art; there are, however, between the Caucasus and Cape Chersonese, where Sebastopol now stands, a series of rock-cut cities—not cities of tombs like those of Syria and elsewhere, but dwellings such as those at Bamian and farther to the eastward. Whether these were monasteries or ordinary dwellings is by no means clear, nor is it quite certain that some of them were not tombs. My own impression is that they are all dwellings. Connected

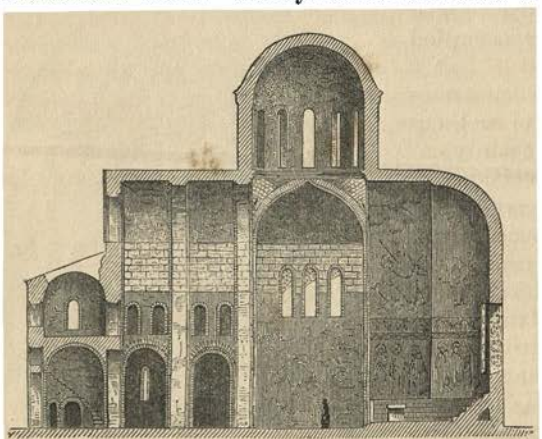
with these was the celebrated city of Panticapea, surrounded by tumuli, which are Etruscan not only in external form and internal construction, but even in the class of ornaments found in them. Most of the vases, like those of Etruria, are of Greek design. In all these points these tumuli would be as appropriate at Tarquinii as here.

Nothing certain is known of the age of the Christian excavations, but they seem always to have belonged to that religion, and are of an early and simple type. Some are square, the roof supported by pillars in the centre; some of the form of the basilicas. In India we would call them Viharas and Chaityas, and, except from their paintings, would not suspect them to belong to another faith than that of Buddhism.



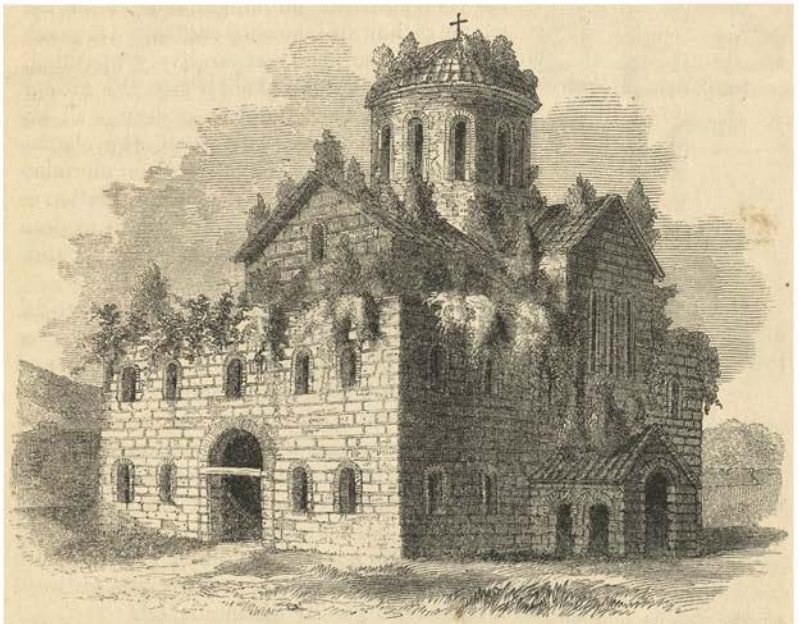
806. Cave at Inkermann. From Dubois de Montpereux.

The largest of the church caves in the Crimea appears to be one at Inkermann (woodcuts Nos. 804 and 805), about 36 ft. in length, and arranged as a small basilica. It is accompanied by square apartments, intended probably for religious purposes equally with the principal or church cave itself. The symbol of the cross is so deeply cut in the screen between the pillars as to show that it must always have been destined for Christian worship. Another square cave at Kirghast has a church now built by the side of it, and where the caves are still held sacred, there seems generally to be a structural part attached to them. These excavations are scattered in great numbers over the country, and, it need hardly be added, have been only very imperfectly examined as yet.



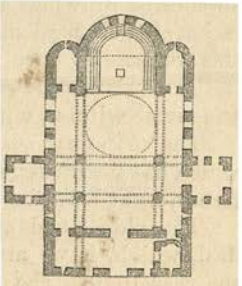
807. Section of Church at Pitzounda. From Dubois.

The first built church which we meet with in these regions is that at Pitzounda in Abbassia, on the shores of the Euxine (woodcuts Nos. 807-809). It is said to have been built by Justinian, and there is nothing in the structure to gainsay this opinion. The cupola, however, must have been rebuilt in more modern times, and the arches



808. View of Church at Pitzounda. From Dubois.

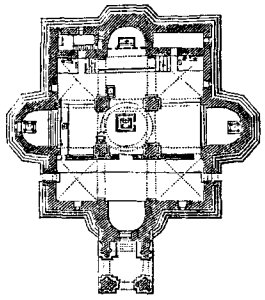
that supported it remodelled at the same time. Externally it is devoid of ornament, except what is obtained by the insertion of tiles between the stones, which give it a gay effect of colour, and the windows and projections are so spaced as to relieve it from heaviness. Internally both its plan and section are remarkable for simplicity. It may be described as a modification of the basilica on a small scale. All the surfaces are left plain, and devoid of architectural ornament, so as to admit of the greatest possible amount of painted decoration, much of which still remains on the half-ruined walls.



809. Plan of Church at Pitzounda.
100 ft. to 1 in.

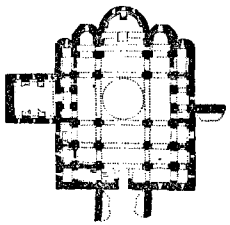
The most important ecclesiastical establishment in this part of the world is that of Etchmiasdin. Here are four churches said to have been built on the spots where rose the two arches or rainbows crossing one another at right angles on which Our Saviour sat when he appeared to St. Gregory. They

consequently ought to be at the four angles of a square, or rectangle of some sort, but this is far from being the case. The principal of these churches is that whose plan is represented in woodcut No. 810. It stands in the centre of a large square, surrounded by ecclesiastical buildings, and is on the whole rather an imposing edifice. Its porch is modern: so also, comparatively speaking, is its dome; but the plan, if not the greater part of the substructure, is ancient, and exhibits the plainness and simplicity characteristic of its age. The other three churches lay claim to as remote a date of foundation as this, but all have been so altered in modern times that they have now no title to antiquity.



810. Plan of Church at Etchmiasdin. From Brosset. Scale 100 ft. to 1 in.

One other church in this part of the world seems to claim especial mention, that of Mokwi, built in the 10th century, and painted, as we learn from inscriptions, between 1080 and 1125. It is a large and handsome church, but its principal interest lies in the fact that in dimensions and arrangement it is almost identical with the contemporaneous church of St. Sophia at Novogorod, showing a connexion between the two countries which will be more particularly pointed out hereafter. It is now very much ruined, and covered with a veil of creepers which prevent its outward form from being easily distinguished.



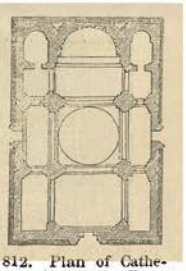
811. Plan of Church at Mokwi. Scale 100 ft. to 1 in.

Besides these a number of churches are mentioned by travellers as belonging to the period that elapsed between Justinian and the 10th century, but in the absence of drawings they are useless for our purpose, and an enumeration of their hard and unfamiliar names would interest no one. From this we pass at once to the 11th century, when what we have called the Armenian style appears in tolerable completeness, and continued to prevail without much change for two or three centuries.

The principal seat of this style is Ani, or at least that is the city which has been oftenest visited and described, and has become therefore to us at least the metropolis of the art.

The oldest and most important building in this city is the cathedral, which, if we may trust the inscription on its face, was built in the year 1010. The small church near the river was about a century later, and that at Dighour near Ani dates from 1240. Comparing these buildings by the rules by which we judge of the age of architectural remains in Europe, we should exactly reverse the order of the series, that at Dighour having nothing but heavy round or horse-shoe arches, with columns of pseudo-classical forms. The cathedral at Ani, on the other hand, has pointed arches, coupled columns, and has every ap-

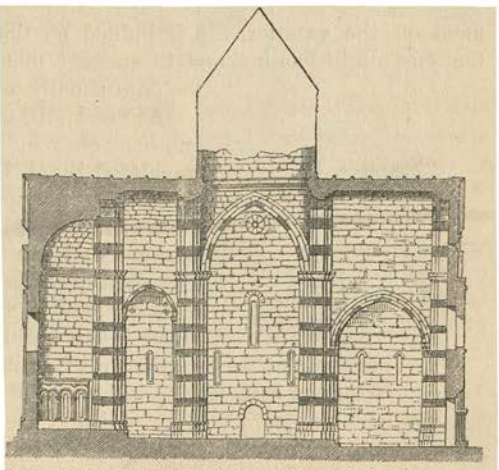
pearance of having felt the influence of the Crusaders. The small church at that place seems intermediate between these two. These and other examples quoted above, go far to prove that the pointed arch was used by the Christians in the East almost as early as the time of Constantine, and was abandoned for the round arch, as in France, at a period when the Mahometans were carrying its application to the greatest degree of perfection. Much, however, remains to be done before the history of the pointed arch, as existing before the Gothic styles, can be written with anything like certainty. The plan, section, and elevation (woodcuts Nos. 812–814) of the cathedral of Ani show the peculiarities of the style with tolerable completeness. It is not large, being only 70 ft. by 110, which is smaller than many parish churches in this country. Its style is remarkably beautiful; the external decoration consisting principally of small but elegant columns attached to the walls, and supporting arches adorned with scrolls of the most elaborate details. The roof is always in these churches broken into two heights, corresponding with the central and side aisles, and the transept is equally marked in the roof, though not in the plan. The most characteristic feature is the dome or cupola which crowns the intersection of the cross vaults. In Armenian churches it is always supported by a tall drum, and the outline is that of a straight-sided cone deeply indented with rectangular flutes.



812. Plan of Cathedral at Ani. From Texier. Scale 100 ft. to 1 in.

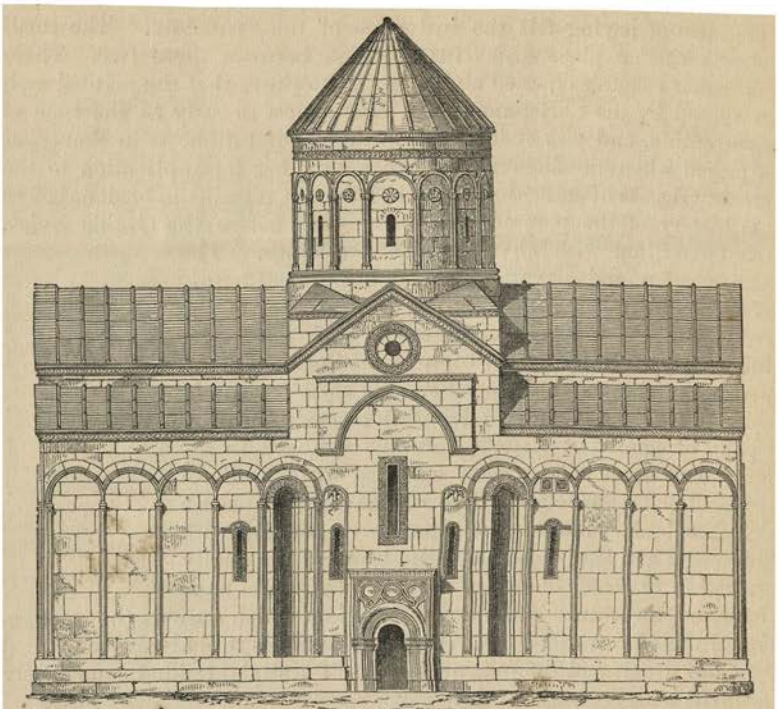
Internally the coupled piers and pointed arches of this cathedral recall more of the feelings of European art than any other building of this neighbourhood, and point to a style either influencing or influenced by a more Western art.

In the plan it will be well to remark the curious mode always employed in this country to mark the apses externally, not by projections, but by angular niches sunk in the wall, and made flush above by a small but richly ornamented arch.



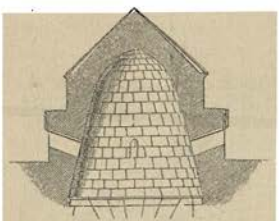
813. Section of Cathedral at Ani. Scale 50 ft. to 1 in.

The construction of the more solid of these domes will be understood from the section of that of Dighour (woodcut No. 815), which shows an elliptical cone internally, with a far more than sufficient abut-



814. Side Elevation of Cathedral at Ani. Enlarged scale.

ment on the exterior. It is indeed so timid a form of construction that one might feel inclined to suspect that there is some mistake in the date usually assigned to this church.

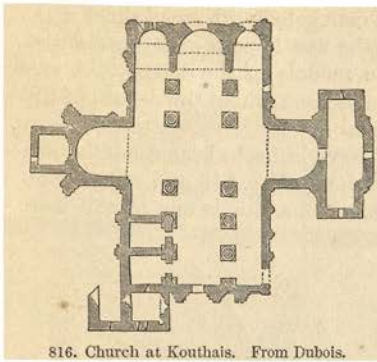


815. Section of Dome at Dighour.

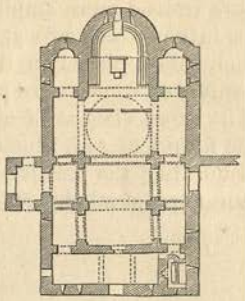
At Sandjerli, not far from Ani, is found another church, which, from inscriptions translated by M. Brosset, and from sections given by him, appears to belong to the same date (1033–1044), and to possess coupled columns and pointed arches like those of the cathedral of Ani, which indeed it resembles in many points, and which renders the date above given highly probable.

The largest and perhaps the finest example of the Armenian style is the now ruined church of Kouthais in Mingrelia, founded 1007. It has neither coupled piers nor pointed arches, but externally is ornamented with the same reed-like pilasters and elaborate frets, which leave no doubt of its being very nearly of the same age as that at Ani.

In the works of Dubois and Brosset the plans of some twenty or thirty churches are given besides those quoted above. They are all small, and so various in their arrangements as to defy classification, at least in the present state of our knowledge. The typical form may be

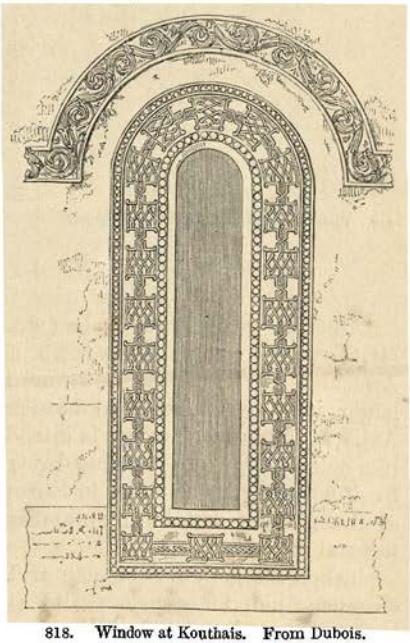


816. Church at Kouthais. From Dubois.
Scale 100 ft. to 1 in.



817. Church at Bedochwinta. From Brosset.
Scale 100 ft. to 1 in.

said to be that shown in the churches at Bedochwinta and Pitzounda, which are also above the average size of these churches. But besides this, some are square, some octagonal: in others polygons of every shape and variety are made up by circling smaller domes round a larger central one, not on each face, as at St. Mark's at Venice, but at the angles and alternate sides. Two, three, and even four churches, are sometimes grouped together side by side, and without any attempt at symmetry. None are large or remarkable for the arrangement of their plans. Internally they were always painted, and externally adorned with the reed-like columns shown in woodcut No. 814, and their windows and openings often ornamented with minute and elaborate carving more like jeweller's work than anything designed to be executed in stone. The general character of these decorations may be judged of from the specimen shown in woodcut No. 818, which is plain compared with some examples quoted by Dubois and Brosset, where the same elaborate intricacy is carried to an inconceivable extent—so much so that its value is often lost from its excessive minuteness.

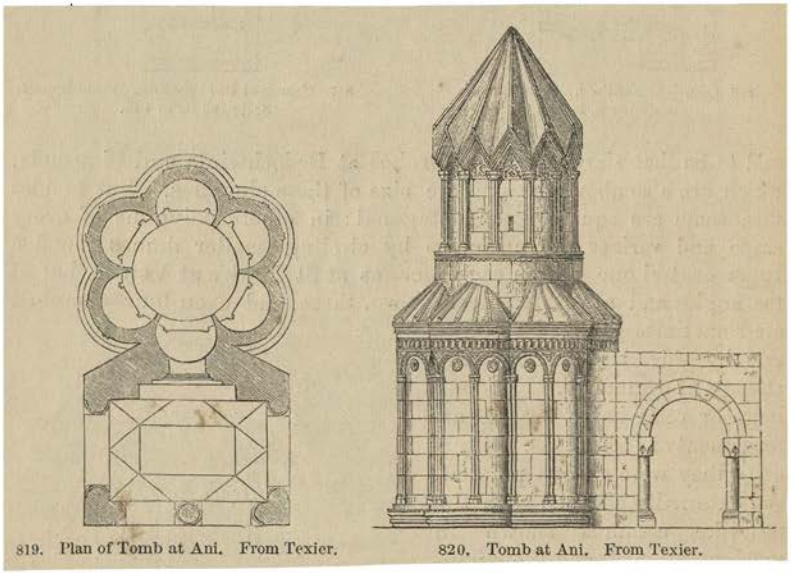


818. Window at Kouthais. From Dubois.

In Armenia we find frequent instances of circular or polygonal churches, a form very rare, and nearly unknown, in most other parts of the great Byzantine architectural province. Here, as elsewhere, they

are, so far as I know, always tombs or connected with sepulchral rites, and are indeed mere amplifications of the usual tombs of the natives of the country, which are generally little models of the domes of Armenian churches placed on the ground, and from which the domes of the Armenian churches were probably copied.

The most elegant of all these that have hitherto been made known is one found at Ani, illustrated in woodcuts Nos. 819 and 820. Notwithstanding the smallness of its dimensions, this is one of the most elegant sepulchral chapels known.



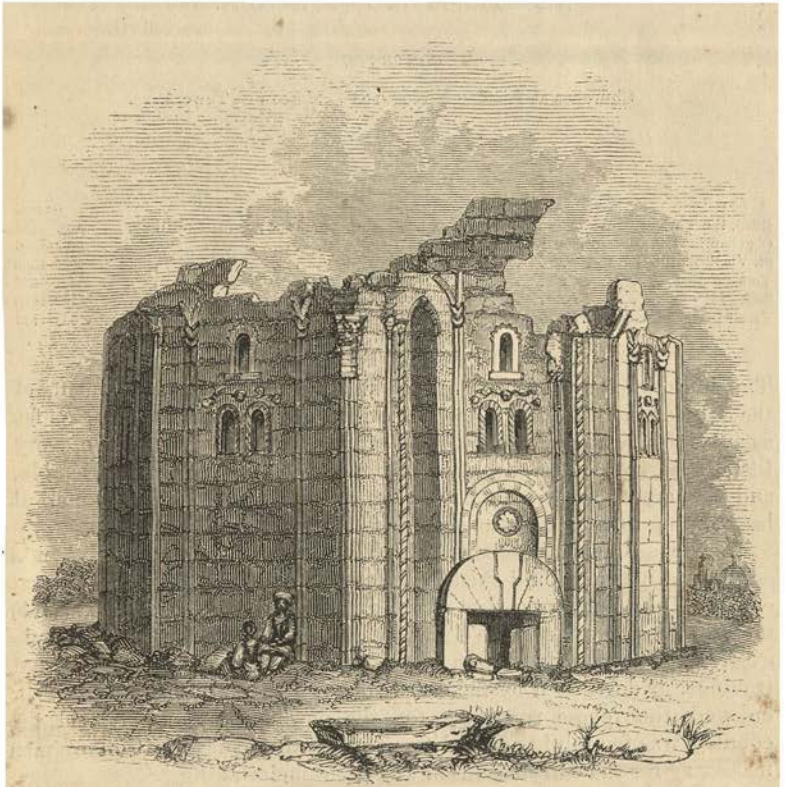
819. Plan of Tomb at Ani. From Texier.

820. Tomb at Ani. From Texier.

Another on a larger scale (woodcut No. 821) is borrowed from Mr. Layard's book. This tomb shows all the peculiarities of the Armenian style of the 11th or 12th century. Though so much larger, it is by no means so beautiful as the last-mentioned tomb at Ani. A further refinement is introduced here, inasmuch as the reed-like columns are tied together by true-love knots instead of capitals, a freak not uncommon either in Europe at the same age, or in the East at the present day, but by no means to be recommended as an architectural expedient.

Taken altogether, Armenian architecture is far more remarkable for elegance than for grandeur, and possesses none of that greatness of conception or beauty of outline essential to an important architectural style. It is still worthy of more attention than it has hitherto received, even for its own sake. Its great title to interest will always be its ethnological value, being the direct descendant of the Sassanian style, and the immediate parent of that of Russia. At the same time, stand-

ing on the eastern confines of the Byzantine empire, it received thence that impress of Christian art which distinguished it from the former, and which it transmitted to the latter. It thus forms one of those important links in the chain of architectural history which when lost render the study of the subject so dark and perplexed, but when appreciated add so immensely to its philosophical interest.



821. Tomb at Varzahan. From Layard's Nineveh and Babylon.

CHAPTER III.

ARCHITECTURE OF RUSSIA.

CONTENTS.

Churches at Kieff — Novogorod — Moscow — Towers.

CHRONOLOGY.

	DATES.		DATES.
Rurik the Varangian at Novogorod	A.D. 850	Tartar wars and domination till	A.D. 1480
Olga baptized at Constantinople	955	Ivan III.	1462–1505
St. Vladimir the Great	980–1015	Basil IV.	1505–1533
Yoraslaf died	1055	Ivan IV., or the Terrible.	1533–1584
Sack of Kieff	1168	Boris	1598–1605
Tartar invasion under Gengis Khan	1228	Peter the Great	1684–1725

The history of architecture in Russia is one of those departments of the subject the materials for which still remain to be collected. As far as any inquiry after architectural beauty is concerned, this is of very little importance; but the historical value of the style is considerable, and the art of so great a nation must not be passed over without at least trying to estimate it at its true value.

There are several reasons which would lead us to anticipate, *à priori*, that nothing could exist in the architecture of Russia either great or beautiful. For, in the first place, from the conversion of Olga (964) to the accession of Peter the Great (1682), with whom the national style expired, the country never emerged from barbarism. Torn by internal troubles, or devastated by incursions of the Tartars, the Russians never enjoyed the repose necessary for the development of art, and the country was too thinly peopled to admit of that concentration of men necessary for the carrying out of any great undertaking.

A second and more important fact is, that the inhabitants of Russia belong, principally at least, to the Slavonian race, which has hitherto shown itself less capable of architectural development than any other of the great divisions of mankind.

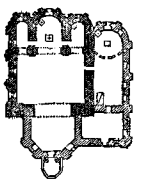
Even according to their own traditions, all the churches at Kieff, their earliest capital, were erected by Greek architects; those of Moscow by Italians or Germans; and those of St. Petersburg, we know, were, with hardly a single exception, erected by Italian, German, or French architects. And these last have perpetrated caricatures of revived Roman architecture worse than are to be found anywhere else. Bad as are some of the imitations of this art found in western Europe, they are all the work of native artists, they are, partially at least, adapted to the climate, and common sense peeps through their worst absurdities; but in Russia only second-class foreigners have been

employed, and the result is a style that out-Herods Herod in absurdity and bad taste. Architecture has languished not only in Russia, but wherever the Slavonic race predominates. In Poland, Hungary, Moldavia, Wallachia, &c., notwithstanding that some of these countries have at times been rich and prosperous, there is not a single original structure worthy to be placed in comparison with even the second-class contemporary buildings of the Teutonic or Celtic races.

A third cause of bad architecture is found in the material used, which almost universally is brick covered with plaster, and it is well known that the tendency of plaster architecture is constantly to extravagance in detail and bad taste in every form. It is also extremely perishable, which opens the way to repairs and alterations in defiance of congruity and of taste, and to the utter annihilation of everything like archæological value in the buildings that still remain.

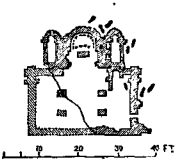
When the material was not brick, it was wood, like most of the houses in Russia of the present day, and the destroying hand of time, aided no doubt by fire at the times of the Tartar invasions, has swept away many buildings which would serve to fill up gaps now, it is feared, irremediable in the history of this art.

Notwithstanding all this, the history of architecture in Russia must by no means be considered as a blank, or as entirely devoid of interest. Locally we can follow the history of this style from the south to the north. Springing originally from two roots, one at Constantinople, the other in Armenia, it gradually extended itself northward to St. Petersburg. It first established itself at Cherson, then Kieff, and after these at Vladimir and Moscow, whence it extended to the great commercial city of Novogorod. At all these places it maintained itself till supplanted by the rise of St. Petersburg.



822. Church of St. Basil, Kieff. Scale 100 ft. to 1 in.

Though the Princess Olga was baptized in 964, the general profession of Christianity in Russia did not take place till the reign of Vladimir (981–1015). He built the cathedral of wood at Cherson which has perished. At Kieff the same monarch built the church of Desiatinna, the remains of which existed till within the last few years, when they were removed to give place to a modern abomination. He also built that of St. Basil in the same city, which, notwithstanding modern improvements, still retains its ancient plan, and is nearly identical in arrangement and form with the Catholicon at Athens (woodcut No. 790). The plan (woodcut No. 822) gives a fair idea of the usual dimensions of the older churches of Russia. The parts shaded lighter are subsequent additions.

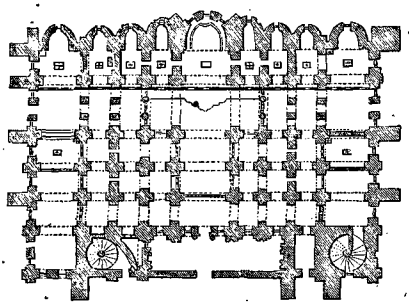


823. St. Irene, Kieff.

A greater builder than Vladimir was Prince Yaroslaf (1019–1054). He founded the church of St. Irene at Kieff (woodcut No. 823), the ruins of which still exist there. It is a good specimen of the smaller class of churches of that date.

His great works were the cathedrals of Kieff and Novogorod, both dedicated to Sta. Sophia, and with the church at Mokwi quoted above (woodcut No. 811) form the most interesting group of Russian churches of that age. All three belong to the 11th century, and are so extremely similar in plan, that, deducting the subsequent additions from the two Russian examples, they may almost be said to be identical. They also show so intimate a connexion between the places on the great commercial road from the Caucasus to the Baltic, that they point out at once the line along which we must look for the origin of the style.

Of the three, that at Kieff[1] (woodcut No. 824) is the largest; but it is nearly certain that the two outer aisles there are subsequent additions, and that the original church was confined to the remaining seven aisles. As it now stands, its dimensions are 185 ft. from north to south, and 136 from east to west. It consequently covers only about 25,000 ft., or not half the usual dimensions of a Western cathedral of the same class. As will be perceived, its plan is like that of the churches of Asia Minor so far as the central aisles are concerned. Its lateral extension resembles that of a mosque, a form very unusual in Christian churches in other countries, but which here may be a Tartar peculiarity. At all events it is generally found in Russian churches, which never adopt the long basilican form of the West. If their length in an eastern and western direction ever exceeds the breadth, it is only by taking in the narthex with the body of the church.



824. Plan of Cathedral at Kieff. Scale 100 ft. to 1 in.

Internally this church retains many of its original arrangements, and many decorations which, if not original, are at least restorations or copies of those which previously occupied their places. Externally it has been so repaired and rebuilt that it is difficult to detect what belongs to the original work.

In this respect the church of Novogorod has been more fortunate. Owing to the early decline of the town it has not been much modernised. The interior of the church retains many of its primitive features. Among other furniture a pair of bronze doors of Italian workmanship of the 12th century closely resemble those of San Zenone at Verona. The part of the exterior that retains most of its early features is the eastern end, represented in the woodcut (No. 825). As will be seen, it retains the long reed-like shafts which the Armenians borrowed from the Sassanians, and which penetrated even to this

[1] All the plans and information regarding the churches at Kieff are obtained from a Russian work devoted to the subject, procured for me on the spot by Mr. Vignoles, C.E.

825. East End of the Church at Novogorod. From a drawing by A. Durand.

remote corner. Whether the two lower circular apses shown in the view are old is by no means clear: it is probable that they are at least built on ancient foundations. The domes on the roof, and indeed all the upper part of the building, belong to a more modern date than the substructure.

The cathedral of Tchernigow, near Kieff, founded 1024, retains perhaps more of its original appearance externally than any other church of its age. Like almost all Russian churches it is square in plan, with a dome in the centre surrounded by four smaller cupolas. To the eastward are three apses, and the narthex in this instance is flanked by two round towers, the upper parts of which with the roofs have been modernised, but the whole of the walls remain as originally erected, especially the end of the transept, which precisely resembles what we find in Greek churches of the age.

To the same age belong the convent of the Volkof (1100) and of

Yourief at Novogorod, the church of the Ascension, and several others at Kieff. All these are so modernised as, except in their plans, to show slight traces of their early origin.

826. Cathedral at Tchernigow. From Blasius, Reisein Russland.

Another of the great buildings of the age was the cathedral of Vladimir (1046). This is said to have been built, like the rest, by Greek artists. The richness and beauty of this building have been celebrated by early travellers, but it has been entirely passed over by more modern writers. From this it is perhaps to be inferred that its ancient form is completely disguised in modern alterations.

The ascendancy of Kieff was of short duration. Early in the 13th century the city suffered greatly from civil wars, fires, and devastations of all sorts, which humbled her pride and inflicted on her such ruin as she never wholly recovered from.

827. Village Church near Novogorod. From a Sketch by A. Durand.

Vladimir was after this the residence of the Grand Dukes, and in the beginning of the 14th century Moscow became the capital, and continued to be so till the seat of empire was transferred by Peter the Great to the present capital. During these three centuries Moscow was adorned with many splendid buildings, which almost all trace their foundation back to the 14th century; but as fires and Tartar invasion have frequently swept over the city since then, few retain any of the features of their original foundation, and it may therefore perhaps be well to see what can be gleaned in the provinces before describing the buildings of the capital.

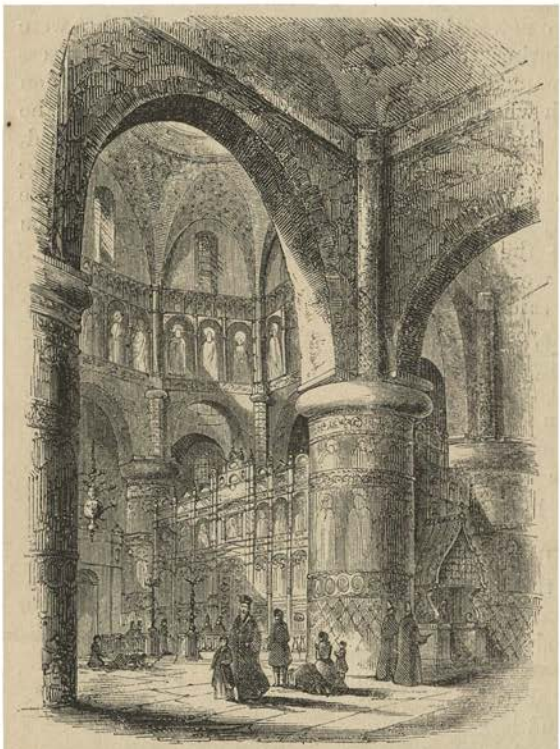
As far as can be gathered from the sketch-books of travellers or their somewhat meagre notes, there are few towns in Russia that were of any importance during the middle ages which do not possess churches said to be founded in the first centuries after its conversion to Christianity, though whether the buildings actually existing are the originals, or how far they may have been altered and modernised, will not be known till some archæologist visits the country, directing his attention to this particular inquiry. It is certain that though the Russians built probably a greater number of churches than any nation of Christendom, like the Greek churches they were all small. Kieff is said, even in the age of Yaroslaf, to have contained 400 churches, Vladimir nearly as many. Moscow, in the year 1600, had 400 churches (of which 37 were in the Kremlin), and now possesses many more.

828. Village Church near Tzarkoe Selo. From Durand.

Many of the village churches still retain their ancient features; the example here given (woodcut No. 827) of one near Novogorod belongs probably to the 12th century, and is not later than the 13th. It retains its shafted apse, its bulb-shaped Tartar dome, and, as is always the case in Russia, a square detached belfry, though in this instance the latter appears somewhat more modern than the edifice itself. Woodcut No. 828 is the type of a great number of the old village churches, which, like the houses of the peasants, are of wood, gene-

rally of logs laid one on the other, with their round ends intersecting one another at the angles, like the log-huts of America at the present day. As architectural objects they are of course insignificant, but still they are characteristic and picturesque.

Internally all the arrangements of the stone churches are such as are appropriate for painted rather than for sculptural decoration. The pillars are generally large cylinders covered with portraits of saints, and the capitals plain, cushion-like rolls, with painted ornaments. The vaults are not relieved by ribs nor by any projections that could interfere with the coloured decorations. In the wooden churches the construction is plainly shown, and of course is far lighter. In them also colour almost wholly supersedes carving. The peculiarities of these two styles are well illustrated in the two woodcuts, Nos. 829 and 830, from churches near Kostroma in Eastern Russia. Both belong to the middle ages, and both are favourable specimens of their respective classes. In these examples, as indeed in every Greek church, the principal object of ecclesiastical furniture is the *iconostasis* or image-bearer. The corresponding object in Latin churches is the rood screen that separates the choir from the nave. The rood screen, however, never assumed in the West the importance which the iconostasis always possessed in the East. There it separates from the church the sanctuary and the altar, from which the laity are wholly excluded. Within it the elements are consecrated, in the presence of the priests alone, and are then brought forward to be displayed to the public. On this screen, as performing so important a part, the Greek architects and artists have lavished the greatest amount of care and design, and in every Greek church, from St. Mark's at Venice to the extreme



829. Interior of Church at Kostroma. From Durand.

confines of Russia, it is the object that first attracts attention on entering. It is so important that it must be regarded rather as an object of architecture than of church furniture.

The architectural details of these buildings must be pronounced to be bad, for, even making every allowance for difference of taste, there is neither beauty of form nor constructive elegance in any part. The most characteristic features are the five domes that generally ornament the roofs, and they are pleasing features; and when they rise from the *extrados*, or uncovered outside of the vaults, they certainly look well. Too frequently the vault is covered by a wooden roof, and the domes then peer through it in a manner by no means to be admired. The details of the lower part are generally bad. The view (woodcut No. 831) of a doorway of the Troitza Monastery, near Moscow, is sufficiently characteristic. Its most remarkable feature is the baluster-like pillars of which the Russians seem so fond. These support an arch with a pendant in the middle—a sort of architectural *tour de force* which the Russian architects practised everywhere and in every age, but which is far both from being beautiful in itself and from possessing any architectural propriety. The great roll over the door is also unpleasant. Indeed, as a general rule, wherever in Russian architecture the details are original, they must be condemned as ugly.

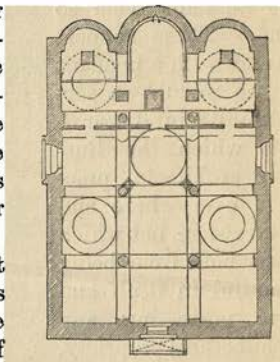
830. Interior of Church near Kostroma. From Durand.

At Moscow we find much that is at all events curious. It first became a city of importance about the year 1304, and retained its prosperity throughout that century. During that time it was adorned by many sumptuous edifices. In the beginning of the 15th century it was taken and destroyed by the Tartars, and it was not till the reign of Ivan III. (1462–1505) that the city and empire recovered the disasters of that period. It is extremely doubtful if any edifice now found in the city can date before the time of that monarch.

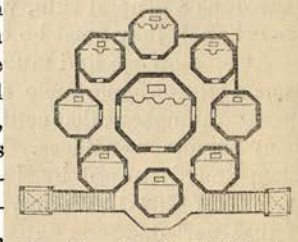
In the year 1479 this king dedicated the new church of the Assumption of the Virgin, said to have been built by one Aristoteles, a native of Bologna in Italy, who was brought to this country expressly for the purpose. The plan of it (woodcut No. 832) gives a good idea of the arrangement of a Russian church of this age. Like the true Byzantine churches, it would be an exact square, but that the narthex being taken into the church gives it a somewhat oblong form. There is, as is almost universally the case, one large dome over the centre of the square, and four smaller in the four angles. The great iconostasis runs, as at St. Sophia at Kieff, quite across the church; but the two lateral chapels have smaller screens inside which hide their altars, so that the part between the two becomes a sort of private chapel. This seems to be the plan of the greater number of the Russian churches of this age.

831. Doorway of the Troitza Monastery, near Moscow.

But there is one church in Moscow, that of Vassili (St. Basil) Blanskenoy, which is certainly the most remarkable, as it is the most characteristic, of all the churches of Russia. It was built by Ivan the Cruel (1534–1584), and its architect was a foreigner, generally supposed to have been from the West, inasmuch as this monarch sent an embassy to Germany under one Schlit, to procure artists, of whom he is said to have collected 150 for his service. If, however, German workmen erected this building, it certainly was from Tartar designs. Nothing like it exists to the westward. It more resembles the Kylas at Ellora, or the Raths at Mahavellipore, than any

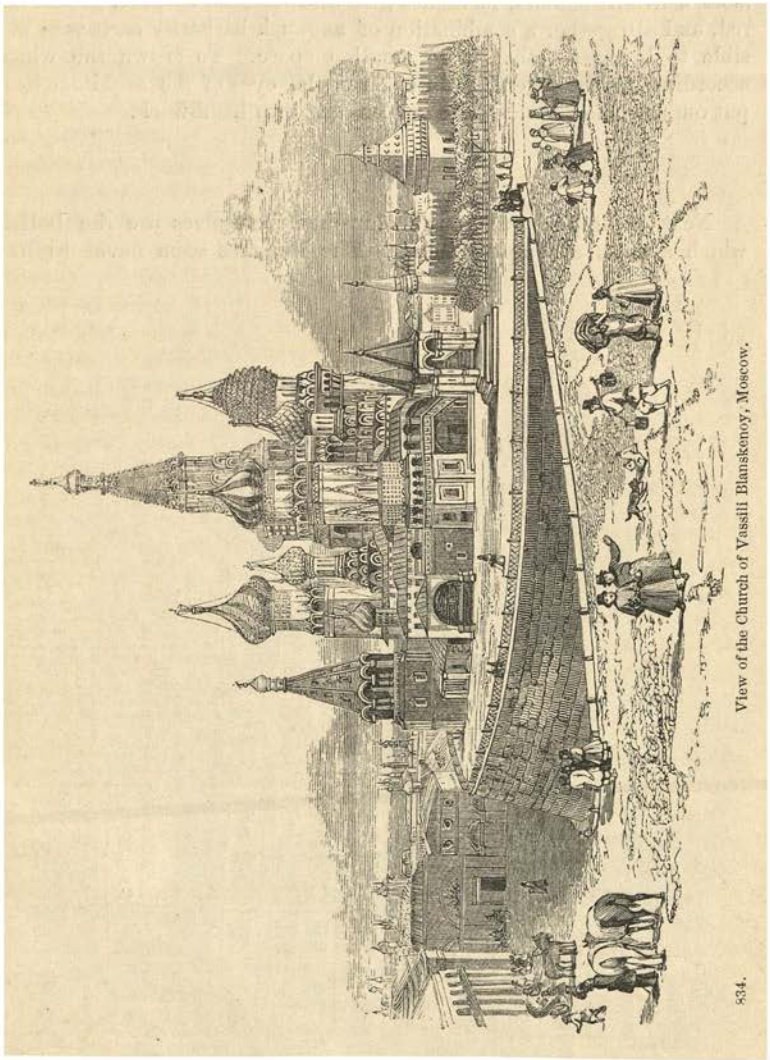


832. Plan of the Church of the Assumption, Moscow. No scale.



833. Plan of the Church of Blanskenoy, Moscow. No scale.

European structure, and in fact must be considered as almost purely a Tartar building. Still, though strangely altered by time, most of its forms can be traced back to the Byzantine style as certainly as the details of the cathedral of Cologne to the Romanesque. The central spire, for instance, is the form into which the Russians had during five centuries



View of the Church of Vasili Blanskenoy, Moscow.

834.

gradually changed the straight-lined dome of the Armenians. The eight others are the Byzantine domes converted by degrees into the bulb-like forms which the Tartars practised at Agra and Delhi, as well as throughout Russia. The arrangement of these domes will be understood by the plan (woodcut No. 833), which shows it to consist of one

central surrounded by eight smaller octagons, raised on a platform ascended by two flights of stairs, beneath which is a crypt. The general appearance will be understood from the woodcut, for words would fail to convey any idea of so bizarre and complicated a building as this is. At the same time it must be imagined as painted with the most brilliant colours, its domes gilt and relieved by blue, green, and red, and altogether a combination of as much barbarity as it was possible to bring together in so small a space. To crown the whole, according to the legend, Ivan ordered the eyes of the architect to be put out, lest he should see to surpass his own handiwork.

Towers.

Next in importance to the churches themselves are the belfries which always accompany them. The Russians seem never to have

835. Tower of Ivan Veliki, Moscow.

adopted separate baptisteries, nor did they affect any sepulchral magnificence in their tombs. From the time of Herodotus the Scythians were great casters of metal, and famous for their bells. The specimens of casting of this sort in Russia reduce by comparison all the great bells of Western Europe to insignificance. It of course became necessary to provide places in which to hang these bells; and as no feature, either in Byzantine or Armenian architecture, afforded a hint for amalgamating the belfry with the church, they went to work in their own way, and constructed their towers wholly independent of the churches themselves. Of all those in Russia, that of Ivan Veliki, erected by the Czar Boris, about the year 1600, is the finest. It is surmounted by a cross 18 ft. high, standing on a crescent, as is universally the case on all ecclesiastical buildings. Its total height is 269 ft. It cannot be said to have any great beauty, either of form or detail; but it rises boldly from the ground, and towers over all the other buildings of the Kremlin. With this tower for its principal object, the whole mass of building is at least picturesque, if not architecturally beautiful. In the woodcut (No. 835) it is shown with the belfry, which was blown up by the French previous to their retreat, and has been since rebuilt, and with a church on either hand, making up the finest group in the Kremlin.

836. Tower of Boris, Kremlin, Moscow.

Besides the bell-tower the walls of the Kremlin are adorned with towers, not meant merely as military defences, but as architectural ornaments, and which remind us more of those described by Josephus, as erected by Herod on the walls of Jerusalem. One of these towers (woodcut No. 836), built by the same Czar Boris who erected that last described, is a good specimen of its class. It

is one of the principal of those which give to the walls of the Kremlin so peculiar and striking a character.

These towers, however, are not peculiar to the Kremlin of Moscow. Every city had its Kremlin in Russia, as every one in Spain had its Alcazar, and all were adorned with walls deeply machicolated, interspersed with towers. Within this were inclosed 5-domed churches and belfries, just as at Moscow, only of course on a scale proportionate to the importance of the city, and it would be easy to select numerous illustrations of the sort. They are all very much like one another, nor have they sufficient beauty to require us to dwell long on them. Their gateways, however, are frequently important. Every city had its *porta santa*, deriving its importance either from some memorable event, or from miracles wrought there, and being the triumphal gateways through which all processions pass on state occasions.

837. Holy Gate, Kremlin, Moscow.

The best known of these is that of Moscow, beneath whose sacred arch even the Emperor himself must uncover his head as he passes through; and which, from its sanctity as well as its architectural character, forms an important feature among the antiquities of Russia.

So numerous are the churches, and generally speaking, the fragments of antiquity in this country, that it would be easy to multiply examples to almost any extent. Those quoted in the preceding pages are certainly not only the finest architecturally, but also the most interesting in an antiquarian point of view, of those which have yet been visited and drawn, and there is no reason to believe that others either more magnificent or more beautiful still remain undescribed.

This being the case, it is safe to assert that Russia contains nothing

that can at all compare with the cathedrals, or even the parish churches of Western Europe, either in dimensions or in beauty of detail. Every chapter in the history of architecture must contain something to interest the student: but there is none less worthy of attention than that which describes the architecture of Russia, especially when we take into account the extent of territory occupied by this people, and the enormous amount of time and wealth which has been lavished on the numberless but insignificant buildings which are found in every corner of the empire.

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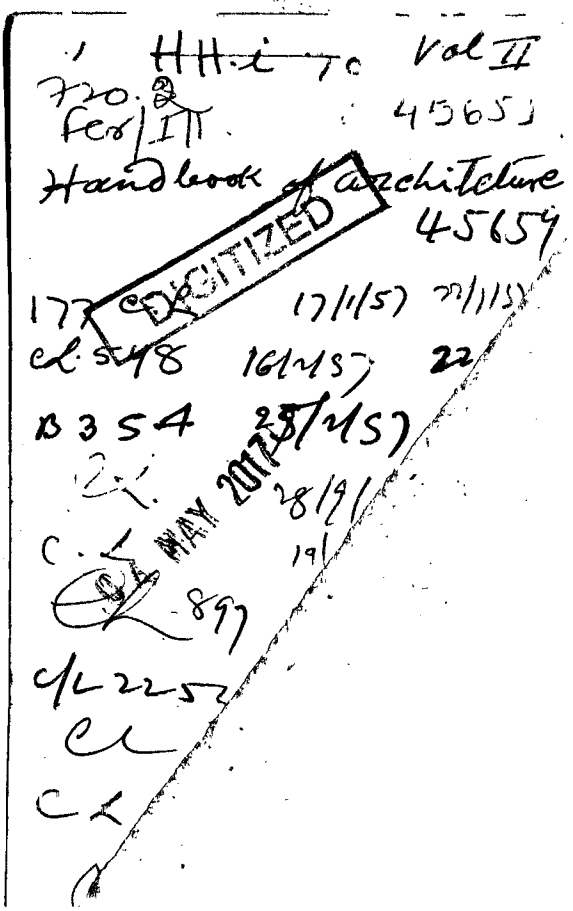

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